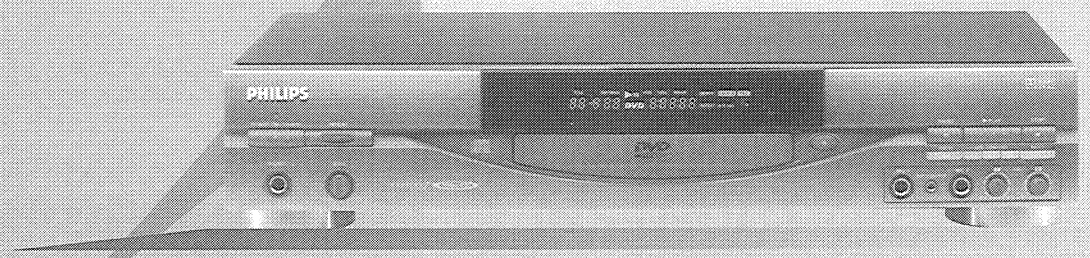
DVD-VIDEO

DVD840

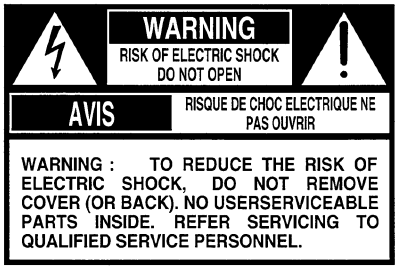


USER MANUAL

PHILIPS

482273615755

SAFETY PRECAUTIONS


WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN
AVIS
RISQUE DE CHOC ELECTRIQUE NE
PAS OUVRIR
WARNING : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USERSERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.**

CAUTION: **TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

ATTENTION: **POUR EVITER LES CHOCS ELECTRIQUE, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.**

CAUTION: This Digital Video Disc Player employs a Laser System.
To ensure proper use of this product, please read this owner's manual carefully and retain for future reference. Should the unit require maintenance, contact an authorized service location - see service procedure.

Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure.
Visible laser radiation when open and interlocks defeated.
DO NOT STARE INTO BEAM.

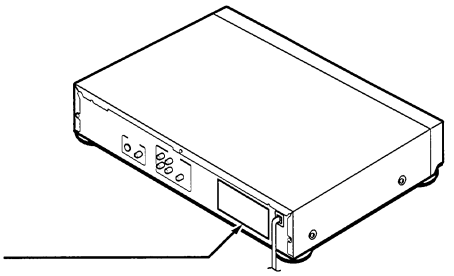
WARNING: Changes or modifications made to this equipment, not expressly approved by Philips Consumer Electronics Company, or parties authorized by Philips Consumer Electronics Company, could void the user's authority to operate the equipment.

In the spaces provided below, record the Model and Serial No. located on the rear panel of your DVD video player.

Model No. _____ Serial No. _____

Retain this information for future reference.

Location of the required label



WARNING

TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

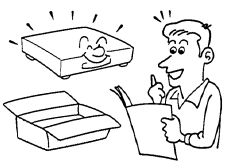
DISTRIBUTED BY:
PHILIPS CONSUMER
ELECTRONICS CO.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS GIVEN IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.
DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. Read owner's manual
After unpacking this product, read the owner's manual carefully, and follow all the operating and other instructions.

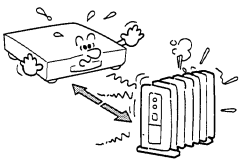


2. Power Sources
This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

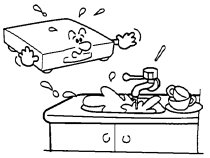
3. Ventilation
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

IMPORTANT SAFETY INSTRUCTIONS

4. Heat
The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



5. Water and Moisture
Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.

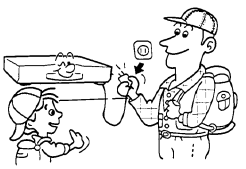


6. Cleaning
Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

7. Power-Cord Protection
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

8. Overloading
Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

9. Lightning
For added protection for this product during a storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.



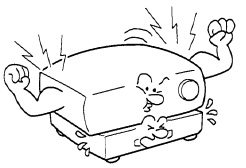
10. Object and Liquid Entry
Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

11. Attachments
Do not use attachments not recommended by the product manufacturer as they may cause hazards.

12. Accessories
Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

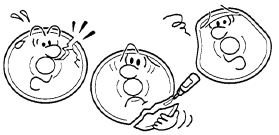
13. Disc Tray
Keep your fingers well clear of the disc tray as it is closing. It may cause serious personal injury.

14. Burden
Do not place a heavy object on the product or step on it. The object may fall, causing serious personal injury and serious damage to the product.



15. Headphones
When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously at a high volume, it may cause hearing damage.

16. Disc
Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

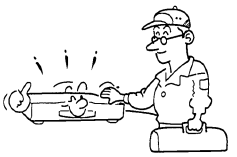


17. Damage Requiring Service
Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
a) When the power-supply cord or plug is damaged.
b) If liquid has been spilled, or objects have fallen into the product.
c) If the product has been exposed to rain or water.
d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
e) If the product has been dropped or damaged in any way.
f) When the product exhibits a distinct change in performance - this indicates a need for service.

18. Servicing
Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

19. Replacement Parts
When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

20. Safety Check
Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.



Precautions

Notes on Handling

- When shipping the DVD video player, the original shipping carton and packing materials come in handy. For maximum protection, repack the unit as it was originally packed at the factory.
- Do not use volatile liquids, such as insect spray, near the DVD video player. Do not leave rubber or plastic products in contact with the DVD video player for a long time. They will leave marks on the cabinet.
- The top and rear panels of the DVD video player may become warm after a long period of use. This is not a malfunction.
- When the DVD video player is not in use, be sure to remove the disc and turn off the power.
- If you do not use the DVD video player for a long time, the unit may not function properly in the future. Use the DVD video player occasionally.

Notes on Location

- When you place this DVD video player near a TV, radio, or video cassette recorder (VTR), the playback picture may become poor and the sound may be distorted. In this case, place the DVD video player away from the TV, radio, or VTR.

Notes on Cleaning

Use a soft, dry cloth for cleaning.

- For stubborn dirt, soak the cloth in a weak detergent solution, wring the cloth well, and wipe the unit. Use a dry cloth to wipe it dry.
  Do not use any type of solvent, such as thinner and benzine, as they may damage the surface of the DVD video player.
- If you use a chemical saturated cloth to clean the unit, follow that product's instructions.

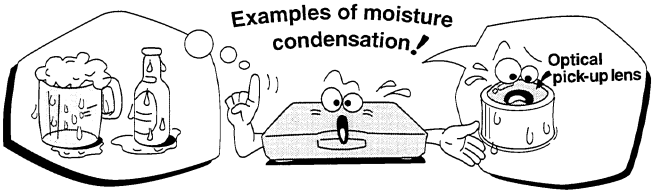
To Obtain a Clear Picture

The DVD video player is a high technology, precision device. If the optical pick-up lens and disc drive parts are dirty or worn down, the picture quality becomes poor. To obtain a clear picture, we recommend regular inspection and maintenance (cleaning or parts replacement) every 1,000 hours of use depending on the operating environment. For details, contact your nearest dealer.

Notes on Moisture Condensation

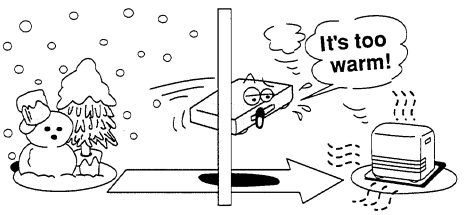
Moisture condensation damages the DVD video player. Please read the following carefully.

Moisture condensation occurs, for example, when you pour a cold drink into a glass on a warm day. Drops of water form on the outside of the glass. In the same way, moisture may condense on the optical pick-up lens inside this unit, one of the most crucial internal parts of the DVD video player.



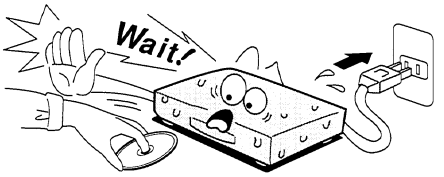
■ Moisture condensation occurs during the following cases.

- When you bring the DVD video player directly from a cold place to a warm place.
- When you use the DVD video player in a room where you just turned on the heater, or a place where the cold wind from the air conditioner directly hits the unit.
- In summer, when you use the DVD video player in a hot and humid place just after you move the unit from an air conditioned room.
- When you use the DVD video player in a humid place.



■ Do not use the DVD video player when moisture condensation may occur.

If you use the DVD video player in such a situation, it may damage discs and internal parts. Remove the disc, connect the power cord of the DVD video player to the wall outlet, turn on the DVD video player, and leave it on for two or three hours. After two or three hours, the DVD video player will have warmed up and evaporated any moisture. Keep the DVD video player connected to the wall outlet and moisture condensation will seldom occur.



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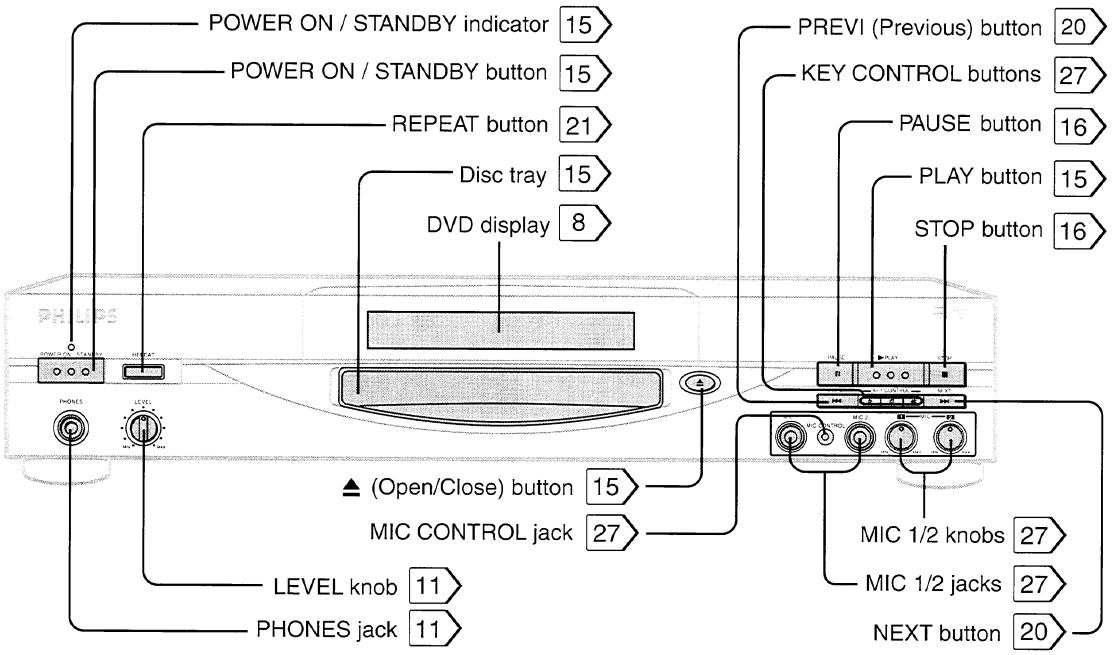
Identification of Controls

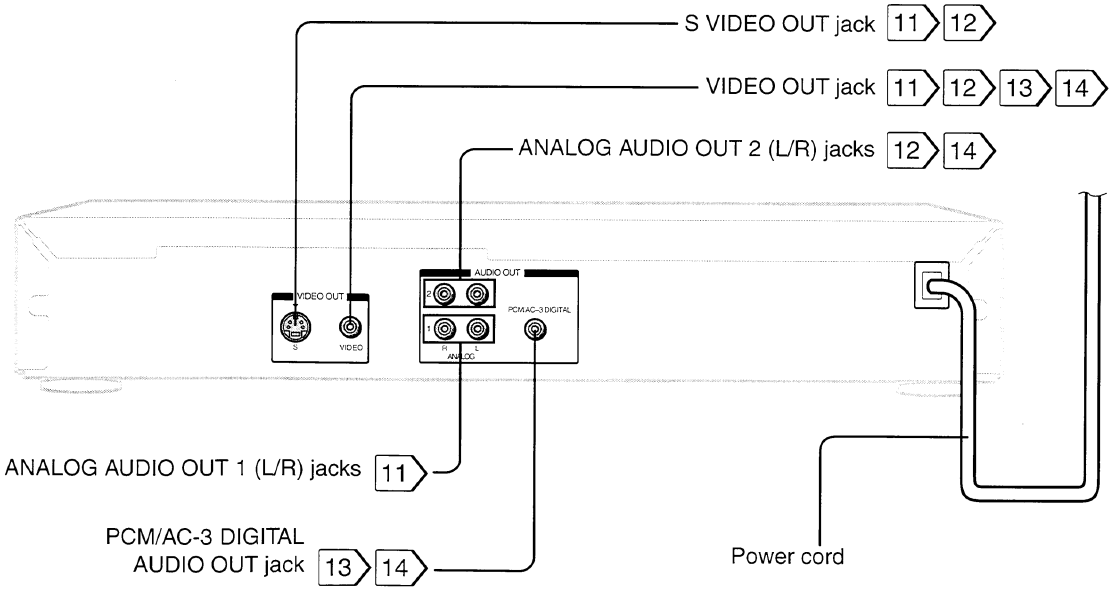
See the page number inside the ▷ for details.

Front Panel/Rear Panel/DVD Display

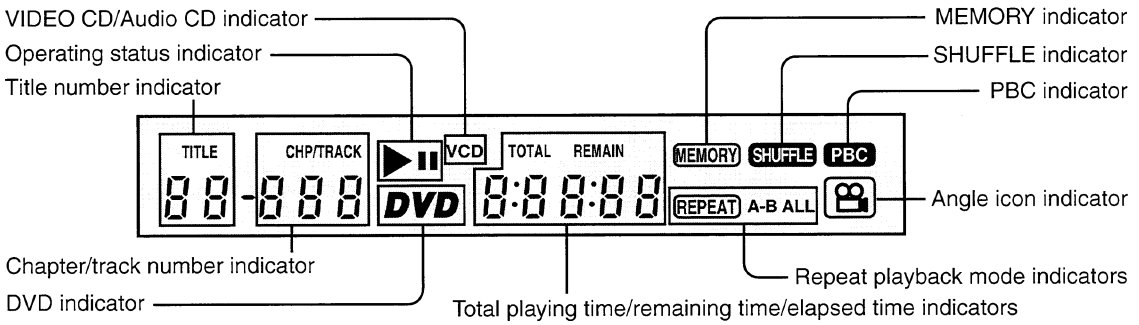
Front Panel



Rear Panel


S VIDEO OUT jack 11 12
VIDEO OUT jack 11 12 13 14
ANALOG AUDIO OUT 2 (L/R) jacks 12 14
ANALOG AUDIO OUT 1 (L/R) jacks 11
PCM/AC-3 DIGITAL AUDIO OUT jack 13 14
Power cord

DVD Display

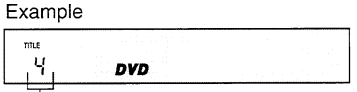


■ The indicators vary depending on the kinds of discs you play.

DVD Video discs

- When closing the disc tray:

Example

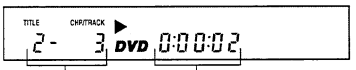


Total number of titles

Some DVD video discs may not display the total number of titles.

- During playback:

Example



Playing chapter 3 in title 2

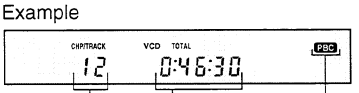
Elapsed time of the current title

Some DVD video discs may not display the chapter numbers or elapsed time.

VIDEO CDs

- When closing the disc tray:

Example



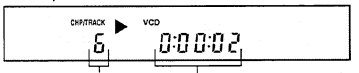
Total number of tracks

Lights up when using a PBC-controllable VIDEO CD

Total playing time of the disc

- During playback:

Example



Playing track 6

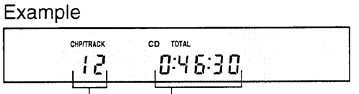
Elapsed time of the current track

Some VIDEO CDs may not display the track numbers or elapsed time.

Audio CDs

- When closing the disc tray:

Example

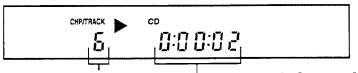


Total number of tracks

Total playing time of the disc

- During playback:

Example



Playing track 6

Elapsed time of the current track

■ Other indicators

REPEAT — When playing back the same title, chapter or track repeatedly. 21

REPEAT A-B — When playing back a specific segment repeatedly. (A-B repeat) 21

REPEAT ALL — When playing back the entire disc repeatedly. 21

II — When playback is paused. 16

MEMORY — During memory playback. 22

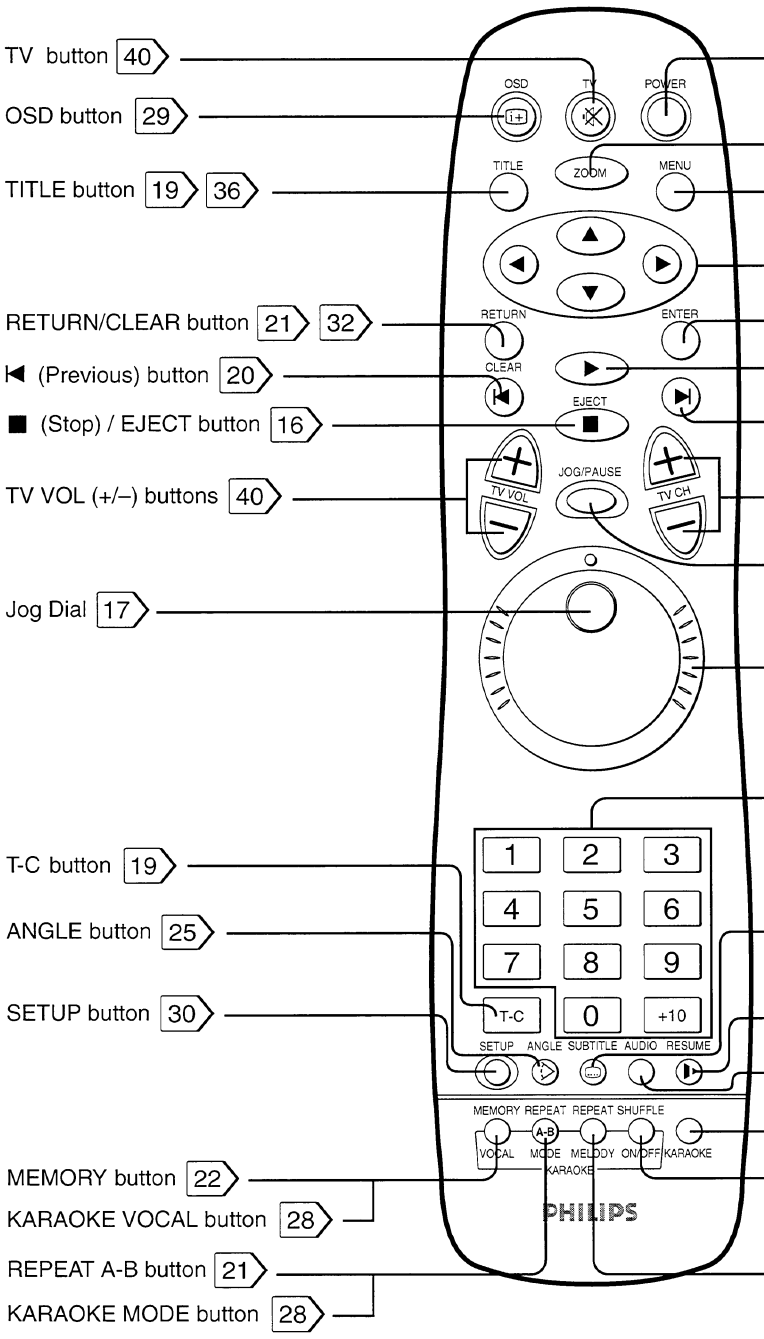
When the camera angle can be changed. 25

SHUFFLE — During random playback. 23

Identification of Controls (continued)

The instructions in this manual describe the functions on the remote control.
See the page number inside the ⟩ for details.

Remote Control



TV button 40
OSD button 29
TITLE button 19 36
RETURN/CLEAR button 21 32
⏮ (Previous) button 20
■ (Stop) / EJECT button 16
TV VOL (+/–) buttons 40
Jog Dial 17
T-C button 19
ANGLE button 25
SETUP button 30
MEMORY button 22
KARAOKE VOCAL button 28
REPEAT A-B button 21
KARAOKE MODE button 28

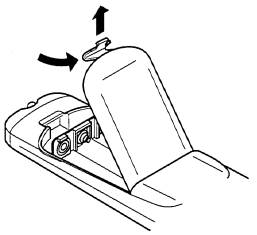
POWER button 15
ZOOM button 24
MENU button 36
▲/▼/◀/▶ (Direction) buttons 16
ENTER button 30
▶ (Play) button 15
⏭ (Next) button 20
TV CH (+/–) buttons 40
JOG/PAUSE button 16 17
Shuttle Ring 17
Number buttons 19
SUBTITLE button 26
RESUME button 18
AUDIO button 25
KARAOKE button 27
SHUFFLE button 23
KARAOKE ON/OFF button 27
REPEAT button 21
KARAOKE MELODY button 28

***MENU button**
Use the MENU button to display the menu screen included on DVD video discs. To operate a menu screen, follow the instructions in "Locating a Title Using the Title Menu" 19 .

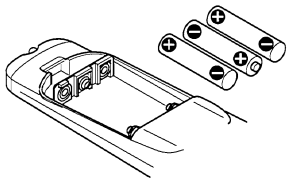
Preparing the Remote Control

Insert the batteries into the remote control so you can use it to operate the DVD video player.

1 **Open the cover.**

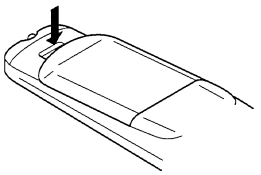


2 **Insert batteries (R06 size).**



Make sure to match the + and – on the batteries to the marks inside the battery compartment.

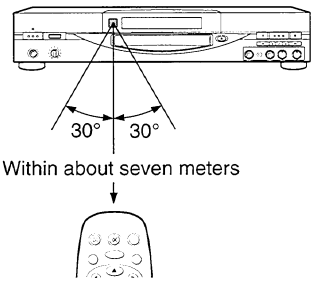
3 **Close the cover.**



Operating with the Remote Control

This section shows you how to use the remote control.

Point the remote control at the remote sensor and press the buttons.



Distance: About seven meters from the front of the remote sensor
Angle: About 30° in each direction of the front of the remote sensor

* Do not expose the remote sensor of the DVD video player to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the DVD video player with the remote control.

Notes on batteries

Improper use of batteries may cause battery leakage and corrosion. To operate the remote control correctly, follow the instructions below.

- Do not insert the batteries into the remote control in the wrong direction (follow the +/– signs).
- Do not charge, heat, open, or short-circuit the batteries. Do not throw the batteries into a fire.
- Do not leave dead or exhausted batteries in the remote control.
- Do not use different types of batteries together, or mix old and new batteries.
- If you do not use the remote control for a long period of time, remove the batteries to avoid possible damage from battery corrosion.
- If the remote control does not function correctly or if the operating range becomes reduced, replace all batteries with new ones.
- If battery leakage occurs, wipe the battery liquid from the battery compartment, then insert new batteries.

Notes on the remote control

- Point the remote control at the remote sensor of the DVD video player.
- Do not drop the remote control.
- Do not leave the remote control near an extremely hot or humid place.
- Do not spill water into or put anything wet on the remote control.
- Do not open the remote control.

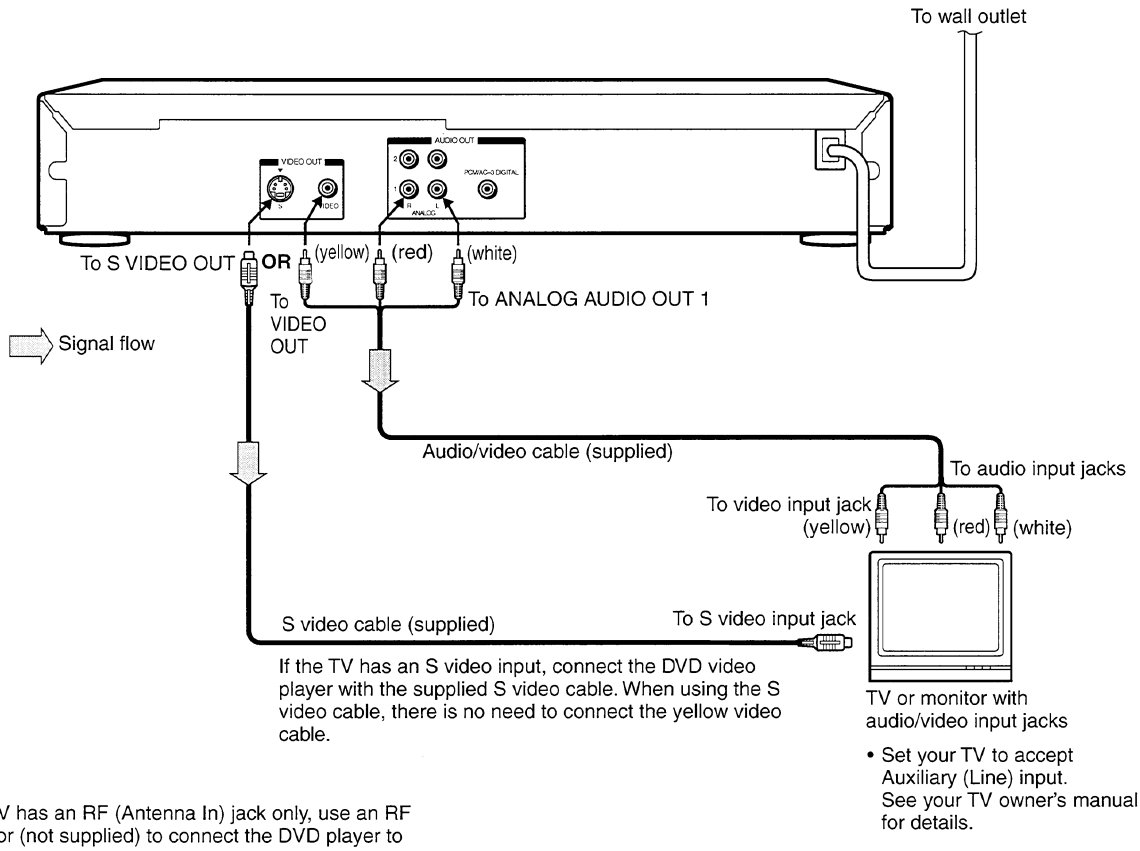
 For details of output sound, see 45.

Connecting to a TV

Connect the DVD video player to your TV.

Connecting to a TV

■ **Setting of the sound output**
From the on-screen displays, set "AUDIO OUT SEL." to "ANALOG/PCM." 30 31

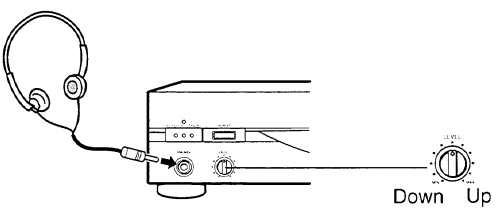

To wall outlet
VIDEO OUT
AUDIO OUT
PCM/AC-3 DIGITAL
ANALOG
To S VIDEO OUT
OR
(yellow)
(red)
(white)
To ANALOG AUDIO OUT 1
To VIDEO OUT
Signal flow
Audio/video cable (supplied)
To audio input jacks
To video input jack
(yellow)
(red)
(white)
S video cable (supplied)
To S video input jack
If the TV has an S video input, connect the DVD video player with the supplied S video cable. When using the S video cable, there is no need to connect the yellow video cable.
TV or monitor with audio/video input jacks
• Set your TV to accept Auxiliary (Line) input. See your TV owner's manual for details.

If your TV has an RF (Antenna In) jack only, use an RF modulator (not supplied) to connect the DVD player to your TV.

Notes

- Refer to the owner's manual of the connected TV as well.
- When you connect the DVD video player to your TV, be sure to turn off the power and unplug both units from the wall outlet before making any connections.
- If your television set has one audio input, use a Y cable adapter (not supplied) to connect to your TV.
- Connect the DVD video player directly to your TV. If you connect the DVD video player to a video cassette recorder (VTR), or TV/VTR combination or video selector, the playback picture will be distorted because DVD video discs are copy protected.

Headphones connection
Connect headphones that have a stereo large size connector.
Before connecting, temporarily lower the sound volume, then adjust the volume.



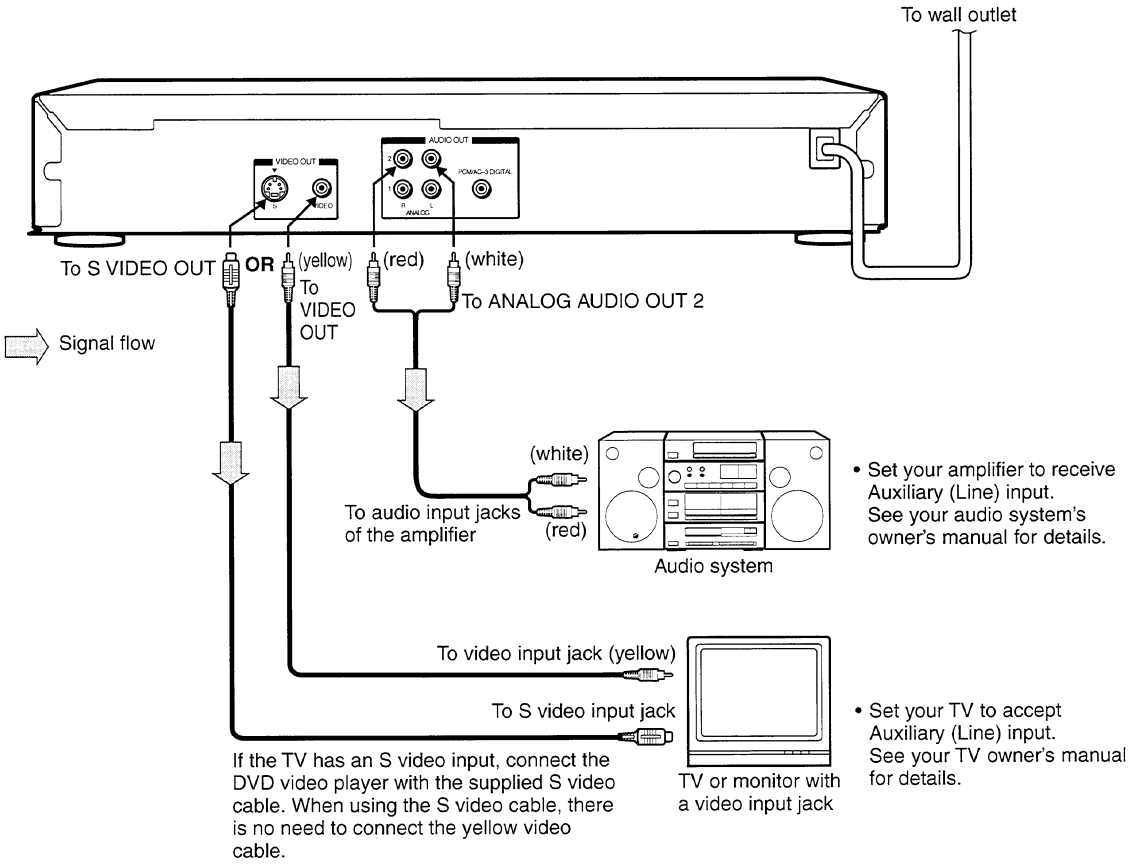
 For details of output sound, see 45.

Connecting to an Audio System

You can listen to the sound of the discs in stereo.

Connecting to an Audio System

■ **Setting of the sound output**
From the on-screen displays, set "AUDIO OUT SEL." to "ANALOG/PCM." 30 31


To wall outlet
VIDEO OUT
AUDIO OUT
PCM/AC-3 DIGITAL
ANALOG
To S VIDEO OUT
OR
(yellow)
To VIDEO OUT
(red)
(white)
To ANALOG AUDIO OUT 2
Signal flow
(white)
To audio input jacks of the amplifier
(red)
Audio system
• Set your amplifier to receive Auxiliary (Line) input. See your audio system's owner's manual for details.
To video input jack (yellow)
To S video input jack
If the TV has an S video input, connect the DVD video player with the supplied S video cable. When using the S video cable, there is no need to connect the yellow video cable.
TV or monitor with a video input jack
• Set your TV to accept Auxiliary (Line) input. See your TV owner's manual for details.

Notes

- Refer to the owner's manual of the connected equipment (TV, audio system) as well.
- When you connect the DVD video player to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- If you place the DVD video player near a tuner or radio, the radio broadcast sound might be distorted. In this case, place the DVD video player away from the tuner and radio.
- The output sound of the DVD video player has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers may be damaged by a sudden high volume sound.
- Turn off the amplifier before you connect or disconnect the DVD video player's power cord. If you leave the amplifier power on, the speakers may be damaged.

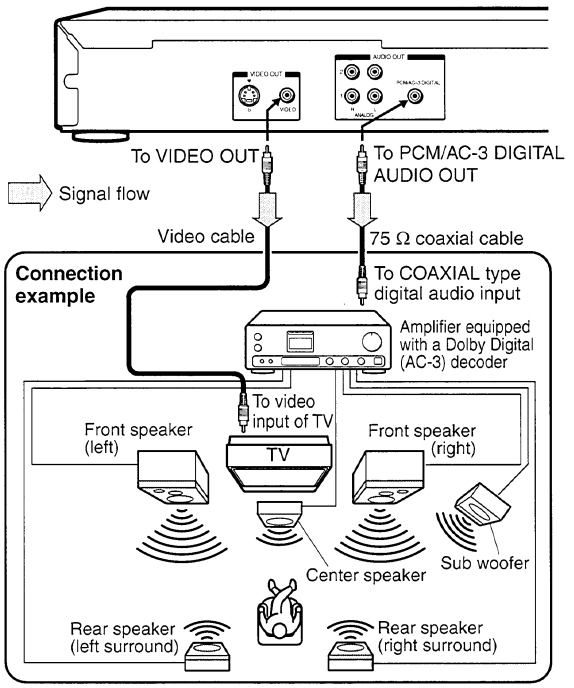
 For details of output sound, see 45.

Connecting to Optional Equipment

You can enjoy the high quality dynamic sound of Dolby Digital (AC-3), Dolby Pro Logic, MPEG 2 and 2 Channel Digital Stereo.

Enjoying Dolby Digital (AC-3) Sound

Dolby Digital (AC-3)
Dolby Digital is the surround sound technology used in movie theaters; it is now available in the home. You can enjoy motion picture and live concert DVD video discs with this dynamic realistic sound by connecting the DVD video player to a six-channel amplifier equipped with a Dolby Digital (AC-3) decoder or Dolby Digital (AC-3) processor. If you have a Dolby Pro Logic Surround decoder, you will obtain the full benefit of Pro Logic from the same DVD movies that provide full 5.1-channel Dolby Digital soundtracks, as well as from titles with the Dolby Surround mark.



■ Setting of the sound output

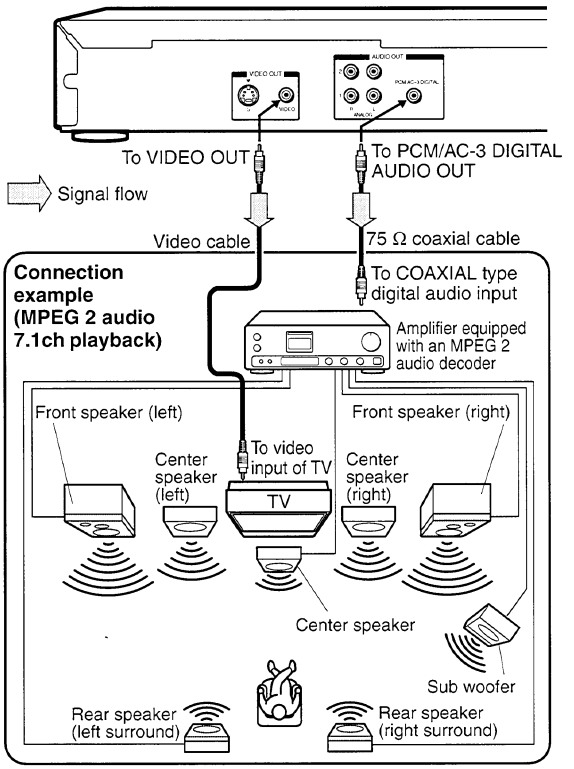
- From the on-screen displays, set the "AUDIO OUT SEL." to "MPEG/AC-3." 30 31
- Set the sound recording system to "AC–3" on the audio setting indication. 25

Karaoke 27 is not available with this connection.

Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby," "AC-3," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Enjoying MPEG 2 Sound

MPEG 2 sound
You can enjoy motion picture and live concert DVD video discs with this dynamic realistic sound by connecting a six- or eight-channel amplifier equipped with an MPEG 2 audio decoder or MPEG 2 audio processor.



- Center speakers (left/right) are not used for MPEG 2 5.1ch sound playback.

■ Setting of the sound output

- From the on-screen displays, set the "AUDIO OUT SEL." to "MPEG/AC-3". 30 31
- Set the sound recording system to "MPEG" on the audio setting indication. 25

Karaoke 27 is not available with this connection.

Notes

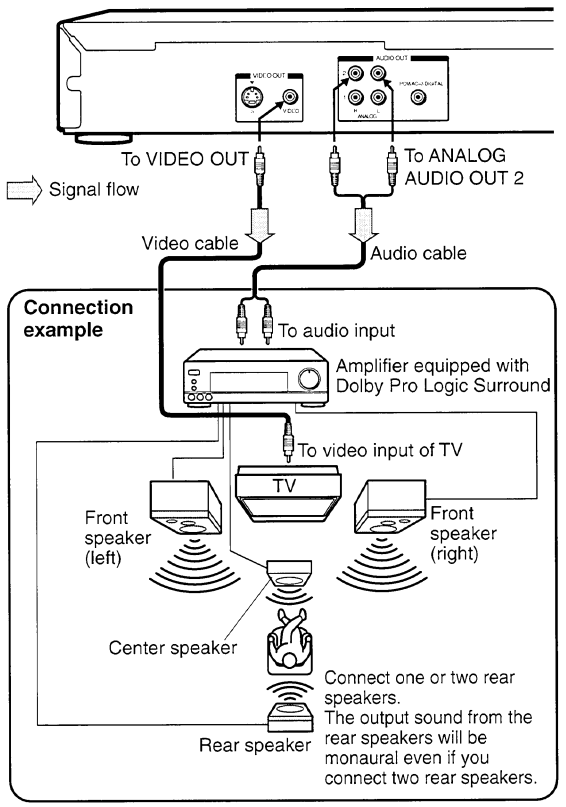
- DO NOT connect the PCM/AC-3 DIGITAL AUDIO OUT jack of the DVD video player to the AC-3 RF input of a Dolby Digital Receiver. This input on your A/V Receiver is reserved for Laserdisc use only and is incompatible with the PCM/AC-3 DIGITAL AUDIO OUT jack of the DVD video player.
- Connect the PCM/AC-3 DIGITAL AUDIO OUT jack of the DVD video player to the "DIGITAL" or "COAXIAL" input of a Dolby Digital Receiver or Processor.
- Connect the speakers according to the instructions in the owner's manual for the speaker system.
- Refer to the owner's manual of the connected equipment as well.
- When you connect the DVD video player to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- The output sound of the DVD video player has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers may be damaged by a sudden high volume sound.
- Turn off the amplifier before you connect or disconnect the DVD video player's power cord. If you leave the amplifier power on, the speakers may be damaged.

Warning
Do not set "AUDIO OUT SEL." to "MPEG/AC–3" via the on-screen displays [30] [31] unless you are connecting (via the PCM/AC-3 DIGITAL AUDIO OUT jack) an AV decoder that has the Dolby Digital (AC-3) decoding function. High volume sound may damage your hearing as well as the speakers.

Enjoying Dolby Pro Logic Surround Sound

Dolby Pro Logic Surround
You can enjoy Dolby Pro Logic Surround sound by connecting an amplifier and speaker system (right and left front speakers, a center speaker, and one or two rear speakers).

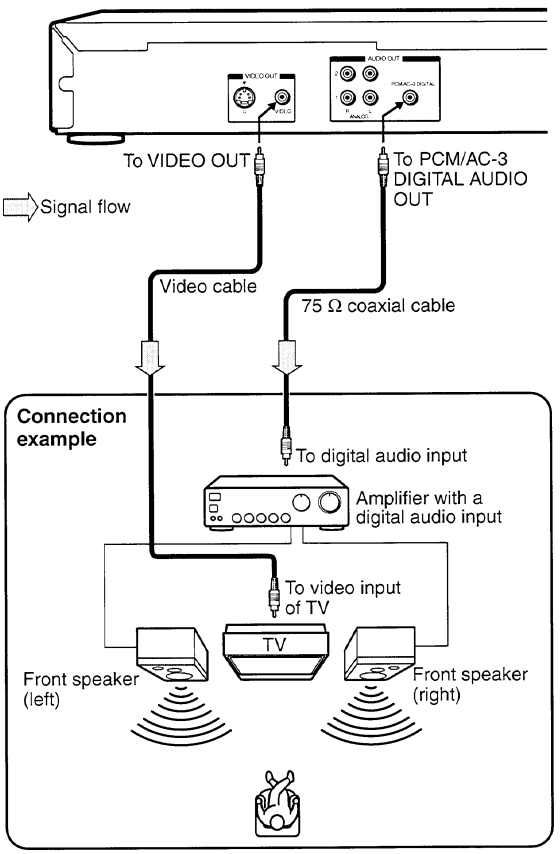
- **With an amplifier equipped with Dolby Digital (AC-3),** connect the equipment the same way as described in "Enjoying Dolby Digital (AC-3) Sound" [13]. Refer to that amplifier's owner's manual and set the amplifier so you can enjoy Dolby Pro Logic Surround sound.
- **With an amplifier not equipped with Dolby Digital (AC-3),** connect the equipment as follows.


To VIDEO OUT
To ANALOG AUDIO OUT 2
Signal flow
Video cable
Audio cable
Connection example
To audio input
Amplifier equipped with Dolby Pro Logic Surround
To video input of TV
TV
Front speaker (left)
Front speaker (right)
Center speaker
Rear speaker
Connect one or two rear speakers.
The output sound from the rear speakers will be monaural even if you connect two rear speakers.

■ Set "AUDIO OUT SEL." to "ANALOG/PCM" via the on-screen displays. [30] [31]

Enjoying Two-channel Digital Stereo Sound

Two-channel Digital Stereo
You can enjoy Two-channel Digital Stereo sound by connecting an amplifier equipped with a digital audio input and speaker system (right and left front speakers).



■ Set "AUDIO OUT SEL." to "ANALOG/PCM" via the on-screen displays. [30] [31]

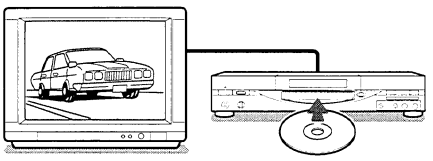
Karaoke [27] is not available with this connection.

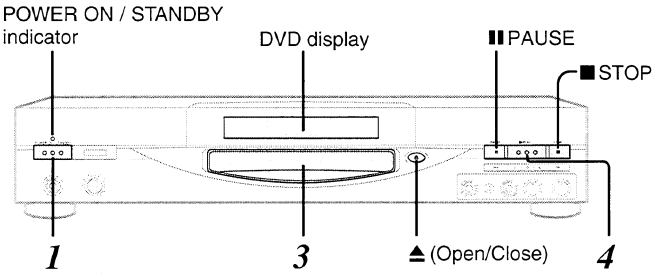
Notes

- Connect the speakers according to the instructions in the owner's manual for the speaker system.
- Refer to the owner's manual of the connected equipment as well.
- When you connect the DVD video player to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- The output sound of the DVD video player has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers may be damaged by a sudden high volume sound.
- Turn off the amplifier before you connect or disconnect the DVD video player's power cord. If you leave the amplifier power on, the speakers may be damaged.

Playing a Disc

CAUTION
Keep your fingers well clear of the disc tray as it is closing. It may cause serious personal injury.





This section shows you how to play a disc.

Basic Playback

■ Preparations

- When you want to play DVD video discs or VIDEO CDs, turn on the TV and put the TV in Auxiliary (Line) input mode.
- When you want to enjoy the sound of a disc from the audio system, turn on the audio system and set the amplifier to receive Auxiliary input.
- For connection details, see "Connections." 11 – 14
- Set the playback picture size according to the picture tube shape or aspect ratio of the connected TV via the on-screen displays. 30 35
- If you do not have the necessary equipment to enjoy Dolby Digital (AC-3) sound, set "AUDIO OUT SEL." to "ANALOG/PCM" via the on-screen displays. 30 31

1 POWER ON / STANDBY

Press POWER ON / STANDBY on the front panel.

The DVD video player turns on and the POWER ON / STANDBY indicator on the player lights.

2

Press ▲ on the front panel

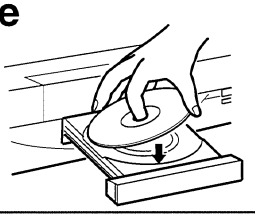
(or hold down ■/EJECT on the remote control for longer than one second).

The disc tray opens.

3

Place the disc in the disc tray.

With the label facing up



Notes

- There are two different disc sizes. Place the disc in the correct guide in the disc tray. If the disc is out of the guide, it may damage the disc and cause the DVD video player to malfunction.
- Do not place anything except DVD video discs, VIDEO CDs, or audio CDs in the disc tray.

4 ▶PLAY

Press PLAY (▶).

The disc tray closes and playback starts.

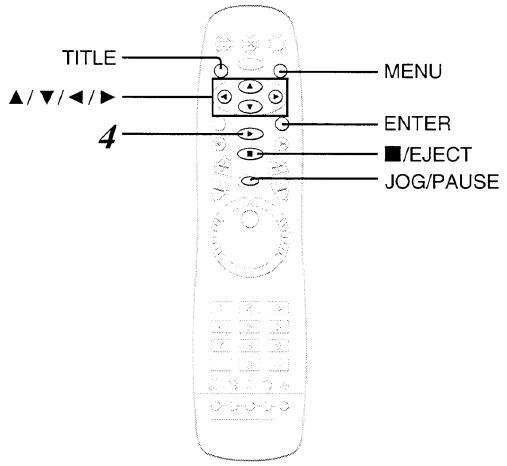
If you insert a DVD video disc that contains a title menu, or insert a PBC (Playback Control)-controllable VIDEO CD, a menu screen may appear. See "To start playback from the menu screen." 16
To start playback of a PBC-controllable VIDEO CD from the menu screen, set "PBC" to "ON" via the on-screen displays. 30 33

Notes

- For PBC (Playback Control) of VIDEO CDs, see "On VIDEO CD." 45
- You may need to press the TITLE or MENU button on the remote control to display the menu screen, depending on the disc.

Notes

- Do not move the DVD video player during playback. Doing so may damage the disc.
- Use the ■ /EJECT button on the remote control or the ▲ button on the DVD video player to open and close the disc tray. Do not push the disc tray while it is moving. Doing so may cause the DVD video player to malfunction.
- Do not push up on the disc tray or put any objects other than discs on the disc tray. Doing so may cause the DVD video player to malfunction.



■ **To obtain a higher quality picture**

Occasionally, some picture noise may appear on the TV screen while playing back a DVD video disc because the high resolution pictures on these discs include a lot of information. While the amount of noise depends on the TV, you should reduce the sharpness adjustment on your TV from the position you usually set for normal broadcasts.

■ **About DVD VCD CD**

The DVD VCD CD symbols on the heading bars in this manual show the playable discs for the function described under that heading.

DVD : You can use this function with DVD video discs.

VCD : You can use this function with VIDEO CDs.

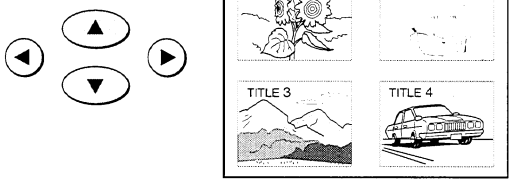
CD : You can use this function with audio CDs.

DVD VCD CD

To start playback from the menu screen

1 Press ▲/▼/◄/► or the number buttons to select the title you want.

Example



2 Press ENTER. (You do not have to press ENTER to start playback if you use the number buttons at step 1.)

ENTER

The DVD video player starts playback from the selected title.

- When not using the menu screen of a PBC-controllable VIDEO CD, set "PBC" to "OFF" via the on-screen displays. 30 33

To stop playback

EJECT

Press ■ /EJECT.

The DVD video player returns to chapter 1 or track 1.

To pause playback (still playback)

JOG/PAUSE

Press JOG/PAUSE during playback.

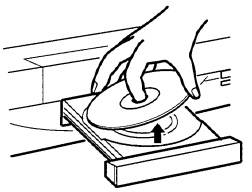
To resume normal playback, press the ► button.

- The sound is muted during still playback.

To remove the disc

EJECT

Hold down ■ /EJECT (for longer than one second) until the disc tray opens.



Remove the disc after the disc tray opens completely.

- Be sure to press the ■ /EJECT button for longer than one second to close the disc tray after you remove the disc.

Basic Playback

Note

In many instances, a menu screen will appear after playback of a movie is completed. Prolonged display of an on-screen menu may damage your television set, permanently etching that image onto its screen. To avoid this, be sure to press the ■ /EJECT button once the movie is completed.

About This Owner's Manual

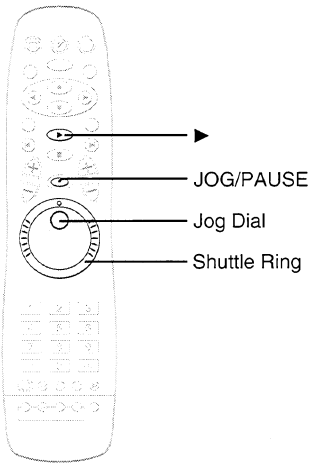
This owner's manual explains the basic instructions of this DVD video player. Some DVD video discs are produced in a manner that allows specific or limited operation during playback. As such, the DVD video player may not respond to all operating commands. Refer to the instruction notes of discs.

" 🚫 " may appear on the TV screen during operation. A white " 🚫 " means that the operation is not permitted by the DVD video player; a red " 🚫 " means the operation is not permitted by the DVD video disc.

Playing a Disc

(continued)

Slow-Motion | Fast reverse Fast forward | Frame by frame | Resume play



You can play discs at various speeds, then resume normal playback from the location where you stopped playback.

Using the Shuttle Ring

DVD VCD CD

You can play discs at various speeds by turning the Shuttle Ring.

1 JOG/PAUSE

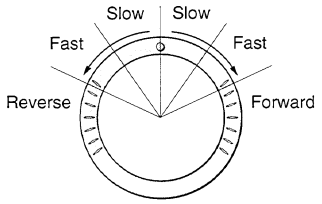
Press and hold JOG/PAUSE during playback.

The JOG/PAUSE button lights and the playback pauses.

2

Turn the Shuttle Ring.

The playback speed can be controlled by the extent of the wheel rotation.



To finish operating the Shuttle Ring

JOG/PAUSE

Press JOG/PAUSE again to turn it off.

Notes

- The playback speed may differ depending on the disc.
- If you slow down the playback speed of a DVD video disc by turning the ring leftward, the DVD video player performs reverse frame playback. The reverse frame playback may advance more rapidly than a forward frame playback.

Using the Jog Dial

DVD VCD

You can advance/reverse a disc frame-by-frame using the Jog Dial.

1 JOG/PAUSE

Press and hold JOG/PAUSE during playback.

The JOG/PAUSE button lights and the playback pauses.

2

Turn the Jog Dial.

Rightward: To advance the picture frame-by-frame.
Leftward: To reverse the picture frame-by-frame.

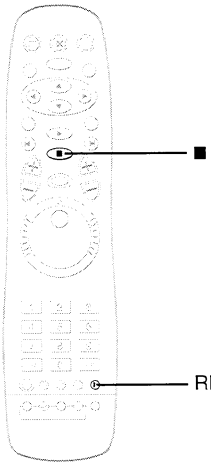
To finish operating the Jog Dial

JOG/PAUSE

Press JOG/PAUSE again to turn it off.

Notes

- The sound is muted during frame-by-frame playback.
- The reverse frame playback may advance more rapidly than a forward frame playback.



DVD VCD CD

Resuming Playback from the Same Location

You can stop playback and resume playback later from the same location on the disc.

1 EJECT ■

Press ■ /EJECT at the location where you want to interrupt playback.

The DVD video player memorizes the location where you stopped playback.

2 RESUME

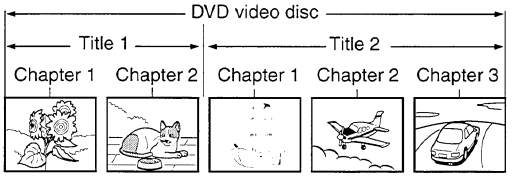
Press RESUME.

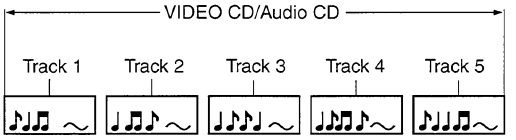
The DVD video player resumes playback from the location where you stopped playback.

Notes

- The playback resuming function is canceled when:
  - you turn the power off by pressing the POWER ON / STANDBY button on the front panel (the POWER ON / STANDBY indicator turns off), or you unplug the DVD video player from the wall outlet after you stop playback.
  - you eject the disc.
  - you adjust/change parental lock 37 or select a disc menu language setting 36 .
- There may be a difference of the location where playback resumes depending on the disc.

Locating a Specific Title, Chapter, or Track





Normally, DVD video discs are divided into titles, and the titles are sub-divided into chapters. VIDEO CDs and Audio CDs are divided into tracks. You can quickly locate any specific title, chapter, or track.

Locating a Title Using the Title Menu

DVD

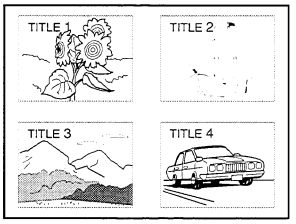
If a DVD video disc contains a title menu, you can locate a specific title using the title menu.

1 TITLE

Press TITLE.

The title menu appears on the TV screen.

Example of a title menu



2 ▲/▼/◄/►

Press ▲/▼/◄/► to select the title you want.

If the titles in the title menu are assigned a number, you can directly locate a specific title by pressing its assigned number with the **number buttons**.

3 ENTER

Press ENTER.

The DVD video player starts playback from chapter 1 of the selected title.

(You may not need to press ENTER if you use the number buttons at step *2*.)

Locating a Title

DVD

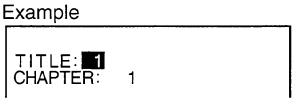
You can locate a specific title by entering a title number.

1 T-C

Press T-C.

Make sure that the space next to TITLE is highlighted.

Example

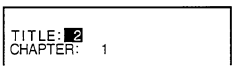


2 1 2 3 4 5 6 7 8 9 0 +10

Press the corresponding number buttons for the title you want.

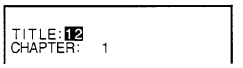
Example: To select title 2, press

2



To select title 12, press

1 → 2



3 ►

Press ►.

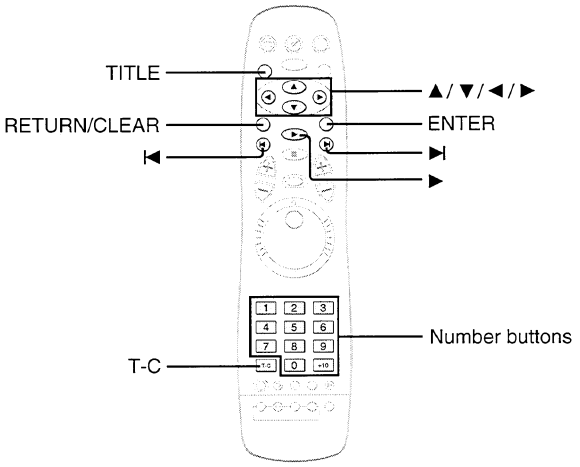
The DVD video player starts playback from chapter 1 of the selected title.

Notes

- The instructions above describe the basic procedure. The procedure varies depending on the contents of the DVD video disc. If different instructions appear on the TV screen, follow those instructions.
- If you display the title menu during playback and press the TITLE button again without selecting any title, the DVD video player may resume playback from the point where you first pressed the TITLE button. If it does not, press ► to resume playback.

Notes

- You can shift the highlight between TITLE and CHAPTER by pressing the ▲/▼ buttons.
- To clear the TITLE and CHAPTER display, press the T-C button repeatedly.
- You can select a preferred language for on-screen displays. 30 35



Locating a Specific Chapter or Track Directly

DVD VCD CD

If you know the chapter or track number you want to play, you can locate it directly.

1 T-C

Press T-C.

Skip steps *1* and *2* if you are using a VIDEO CD or an audio CD.

Example: DVD video disc

TITLE: 1
CHAPTER: 1

2

Press ▼ to highlight the space next to CHAPTER.

Example: DVD video disc

TITLE: 1
CHAPTER:

3 1 2 3 / 4 5 6 / 7 8 9 / 0 +10

Press the corresponding number buttons of the chapter or track you want.

You can use the +10 button to select numbers from 10 through 99.

Example: To select chapter or track 25, press

- 2 → 5
  OR
- +10 → +10 → 5

DVD video disc	VIDEO CD/Audio CD
TITLE: 1 CHAPTER: 25	TRACK : 25

4

Press ▶.

The DVD video player starts playback from the selected chapter or track.

To select a title and chapter number at the same time

Example: To select chapter 25 in title 2, press

T-C → 2 → ▼ → 2 → 5 → ▶

Title number — Chapter number

TITLE: 2
CHAPTER: 25

Note

To clear the TITLE and CHAPTER display, press the T-C button repeatedly.

Locating a Specific Chapter or Track

DVD VCD CD

You can fast forward or reverse through consecutive chapters or tracks.

Press ⏮ or ⏭ repeatedly to advance or reverse to the chapter or track number you want.

The DVD video player starts playback from the selected chapter or track.

⏮ : To locate preceding chapters or tracks
When you press the ⏮ button, the DVD video player starts playback from the beginning of the current chapter or track. When you press the ⏮ button twice, the DVD video player starts playback from the beginning of the preceding chapter or track.

⏭ : To locate succeeding chapters or tracks

Note

Some titles may not display the chapter number.

Locating a Specific Location on the Disc

DVD VCD CD

You can locate a specific location by entering the time (hours, minutes, seconds).

1 T-C

Press T-C twice.

TIME --:--:--

2 1 2 3 / 4 5 6 / 7 8 9 / 0

Press the number buttons to enter the time.

Example 1 → 2 → 5 → 3 → 0

TIME 1:25:30

3

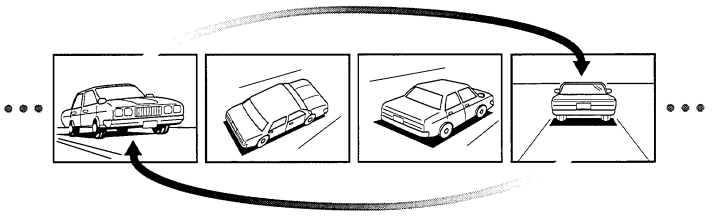
Press ▶.

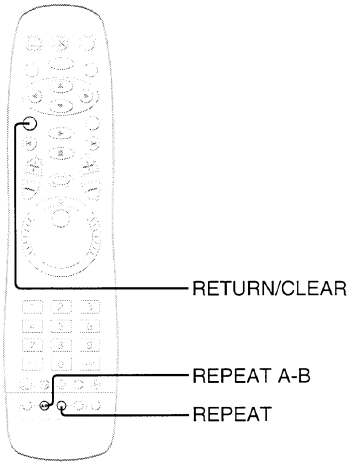
The DVD video player starts playback from the specified location.

Note

Some discs may not respond to this feature.

Playing Repeatedly





You can play a specific title, chapter, track, or segment repeatedly. (Title repeat, chapter/track repeat, A-B repeat)

Repeating a Title, Chapter, or Track

DVD VCD CD

You can play the same title, chapter, or track repeatedly. (Title, chapter/track repeat)

1 **Begin playback of the title, chapter or track you want to repeat.** 19 20

2 REPEAT

Press REPEAT.

Each time you press the REPEAT button, the repeat mode changes as follows.

- **DVD video disc**

CHAPTER REPEAT → Repeats the same chapter.
↓
TITLE REPEAT → Repeats the same title.
↓
REPEAT OFF → Resumes normal playback.

- **VIDEO CD/Audio CD**

TRACK REPEAT → Repeats the same track.
↓
ALL REPEAT → Repeats the entire disc.
↓
REPEAT OFF → Resumes normal playback.

To resume normal playback

RETURN CLEAR

Hold down RETURN/CLEAR for longer than one second.

Repeating a Specific Segment

DVD VCD CD

You can play a specific segment repeatedly. (A-B repeat)

1 REPEAT (A-B)

During playback, press REPEAT A-B at the beginning of the segment (point A) you want to play repeatedly.

A–

2 REPEAT (A-B)

Press REPEAT A-B again at the end of the segment (point B).

A–B

The DVD video player automatically returns to point A and starts repeat playback of the selected segment (A-B).

To resume normal playback

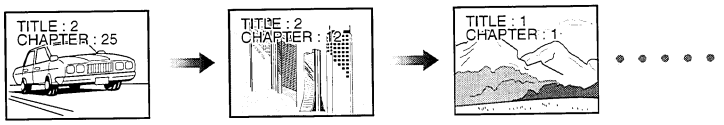
RETURN CLEAR

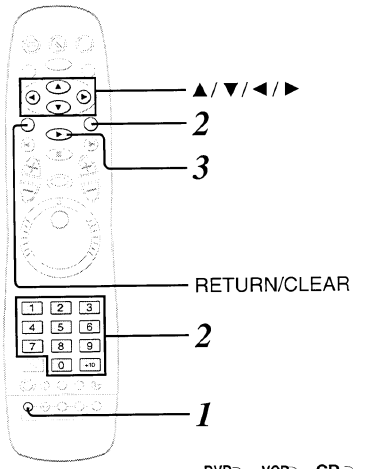
Hold down RETURN/CLEAR for longer than one second.

Notes

- You can specify a segment only within the current title.
- You cannot set the A-B repeat function for a segment that includes multiple camera angles.
- There may be a slight difference between point A and the location where playback actually resumes, depending on the disc.

Playing in a Favorite Order





You can combine your favorite titles, chapters, or tracks and play them in any order. You can program up to 30 items into the memory. (Memory playback)

DVD VCD CD

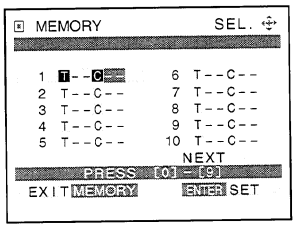
Setting Titles, Chapters, or Tracks in a Favorite Order

The DVD video player automatically plays titles, chapters, or tracks in the order you program.

1 MEMORY

While playback is stopped, insert a disc and press MEMORY.

The following menu appears.



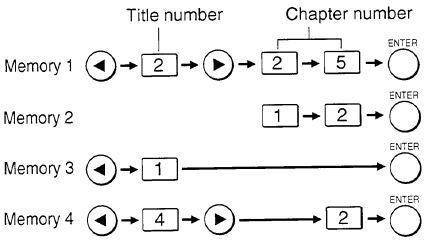
T: Title number C: Chapter number

2 1 2 3 / 4 5 6 / 7 8 9 / 0 +10 → ENTER

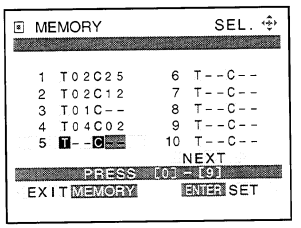
Enter the items you want, in order, by pressing the number buttons, then ENTER for each item.

Each time you press the ◄ / ► button, the -- indication next to T and C is highlighted in turn. Highlight the -- indication next to T (to select a title) or C (to select a chapter), then press the number buttons.

Example: To play chapter 25 in title 2, chapter 12 in title 2, all the chapters in title 1, and chapter 2 in title 4.



To select tracks from a VIDEO CD/Audio CD in order, press the **number buttons** for the track, then press the **ENTER** button for each item you want.



To select another chapter in the same title, you do not need to select the title number.

3 ►

Press ► while the MEMORY menu appears on the TV screen.

The DVD video player starts memory playback.

To change the programmed items

1 While the MEMORY menu appears on the TV screen, press ▲/▼ to move the highlighted bar to the item you want to change.

2 Change the item following the instructions at step *2*.

To cancel the programmed items

1 While the MEMORY menu appears on the TV screen, press ▲/▼ to move the highlighted bar to the item you want to cancel.

2 Hold down the RETURN/CLEAR button for longer than one second.

To resume normal playback from memory playback

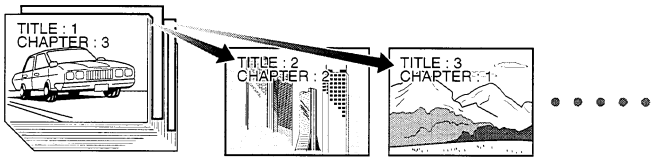
RETURN/CLEAR

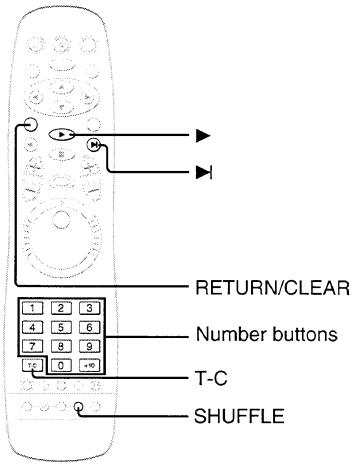
Hold down RETURN/CLEAR for longer than one second.
The MEMORY indicator disappears.

Notes

- If you press the MEMORY button during memory playback, the programmed items will be displayed.
- You cannot select title, chapter, and track numbers not included on the disc.
- If you press the MEMORY button while the MEMORY menu appears on the TV screen, the MEMORY menu disappears.
- The programmed items will be cleared when:
  – you turn off the DVD video player, or
  – you remove the disc.

Playing in Random Order





You can play titles, chapters within a title, or tracks in randon order. (Random playback)

Playing Titles in Random Order

DVD

The DVD video player automatically selects the titles in a DVD video disc and plays them randomly.

1 SHUFFLE

Press SHUFFLE twice while playback is stopped.

TITLE SHUFFLE

If you press the SHUFFLE button during playback, the DVD video player automatically starts random playback after finishing the current title.

2 ▶

Press ▶.

The DVD video player starts random playback.

Press the ▶ button within about five seconds after you press the SHUFFLE button.

To resume normal playback

RETURN / CLEAR

Hold down RETURN/CLEAR for longer than one second.

Note

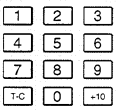
You cannot use the random playback function and the memory playback function at the same time.

Playing Chapters or Tracks in Random Order

DVD VCD CD

The DVD video player automatically selects chapters within a title, or tracks on a VIDEO CD/Audio CD, and plays them randomly.

1 T-C



Press T-C, then press the appropriate number buttons for the title which contains the chapters you want to play in random order.

Skip this step if you are using a VIDEO CD/ Audio CD.

Example: To play the chapters in title 2 in random order, press

T-C → 2

• DVD video disc

TITLE: 2
CHAPTER: 1

2 SHUFFLE

Press SHUFFLE while playback is stopped.

• DVD video disc

CHAPTER SHUFFLE
TITLE: 2
CHAPTER: 1

• VIDEO CD/Audio CD

TRACK SHUFFLE
TRACK: 1

If you press the SHUFFLE button during playback, the DVD video player automatically starts random playback after finishing the current chapter or track.

3 ▶

Press ▶.

The DVD video player starts random playback.

Press the ▶ button within about five seconds after you press the SHUFFLE button.

To resume normal playback

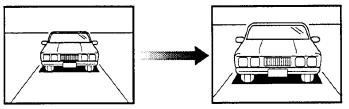
RETURN / CLEAR

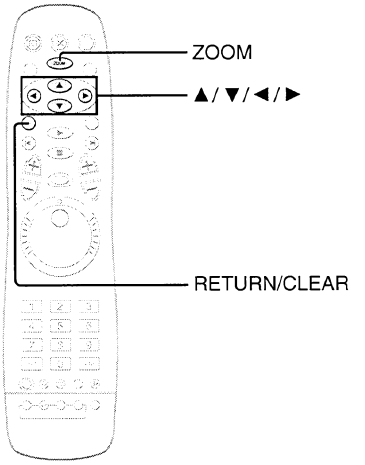
Hold down RETURN/CLEAR for longer than one second.

Note

If you press the ▶| button during random playback, the DVD video player goes to another chapter or track and starts playback.

Zooming a Picture





You can magnify areas within a picture.

DVD

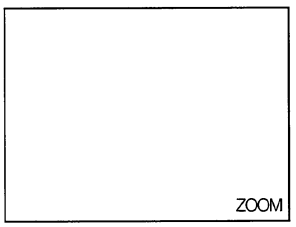
Zooming a Picture

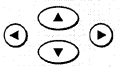
You can zoom a picture. You can shift the zoom point as well.

ZOOM

Press ZOOM during playback.

The DVD video player magnifies the center of the picture.





If you press the ▲/▼/◄/► buttons during zoom playback, the zoom point shifts.
If the zoom point reaches the limit, the color of "ZOOM" changes.
If you hold down the RETURN/CLEAR button for longer than one second, the zoom point returns to the center of the picture.

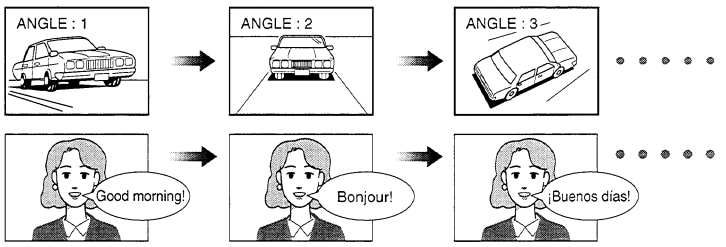
To resume normal playback

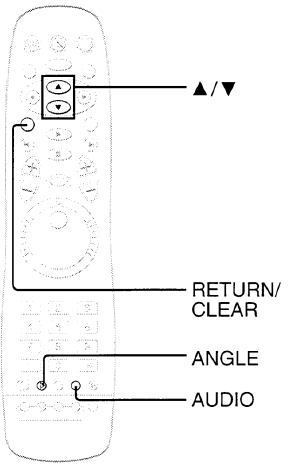
ZOOM **Press ZOOM during zoom playback.**

Notes

- During still playback, the ZOOM button cannot turn the zoom on or off.
- Zooming does not work on the sub-pictures such as subtitles or menu screens included on DVD video discs.

Selecting the Camera Angle/Selecting a Language





A preferred angle can be selected from several angles.
A preferred language can be selected from several languages.

Changing the Camera Angle

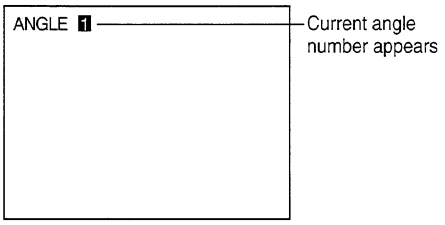
DVD

If the scene was recorded from multiple angles, you can easily change the camera angle of the scene you are watching.

1 Press ANGLE while playing a scene recorded from multiple angles.

ANGLE

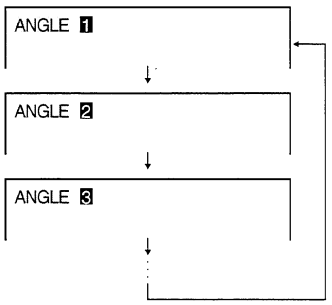
Press the ANGLE button while the angle icon in the DVD display is flashing. ( )



2 Press ANGLE or ▲ while the angle number appears on the TV screen.

ANGLE

Each time you press the ANGLE or ▲ button, the camera angle changes.



▼ : Cycles backwards

- You can change the camera angle directly by pressing the number buttons for the angle number.
- Holding down the RETURN/CLEAR button for longer than one second clears the angle number indication.

Notes

- You can change the camera angle during still playback. The camera angle changes to the new setting when you resume normal playback.
- While playing back a title that contains at least one scene recorded from multiple angles, the angle icon indicator flashes in the DVD display.
- To make the angle icon appear on-screen, see pages 33 - 34 .

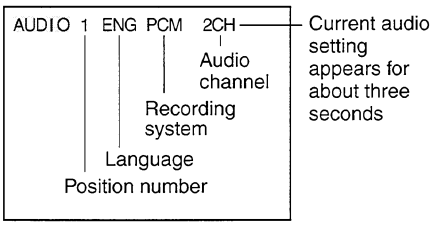
Selecting a Playback Audio Setting

DVD

You can easily select a preferred language and sound recording system from those included on the DVD video disc.

1 Press AUDIO during playback.

AUDIO



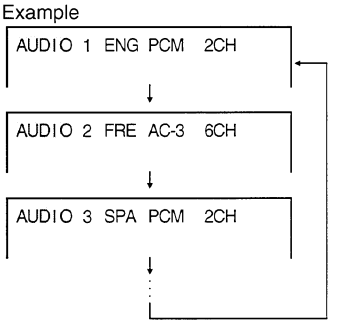
The abbreviation of the language appears instead of the language name. Refer to the list of languages and their abbreviations. 41

2 Press AUDIO or ▲ while the audio setting appears on the TV screen.

AUDIO

Each time you press the AUDIO or ▲ button, the audio settings included on the DVD video disc change.

Example



- ▼ : Cycles backwards
- Holding down the RETURN/CLEAR button for longer than one second clears the audio setting indication.

About recording systems

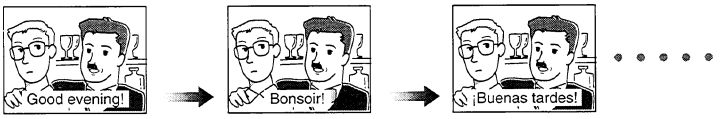
This DVD video player uses the Dolby Digital (AC-3), MPEG 2 and PCM recording systems and cannot play DVD video discs recorded in any other recording system.

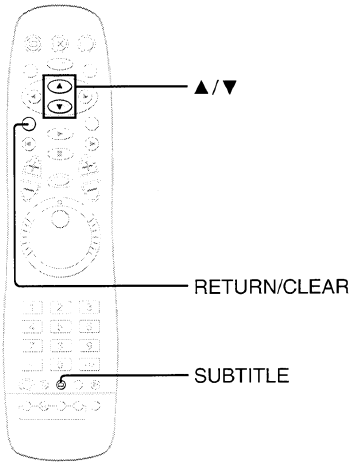
AC-3 5.1 Channel is displayed as "AC-3 6CH."

Note

When you turn on the DVD video player or replace a disc, the player returns to the initial default setting. 31
When you select a sound which is not included on the disc, the DVD video player plays a prior sound programmed on the disc.

Selecting Subtitles





You can display subtitles on the TV screen and select a preferred subtitle language.

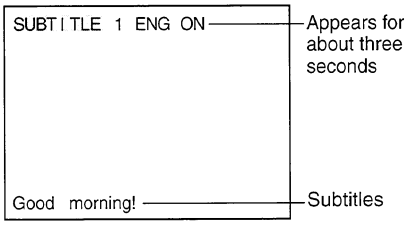
Displaying Subtitles

DVD

You can display subtitles from those included on the DVD video disc.

SUBTITLE

Hold down SUBTITLE for longer than one second during playback.

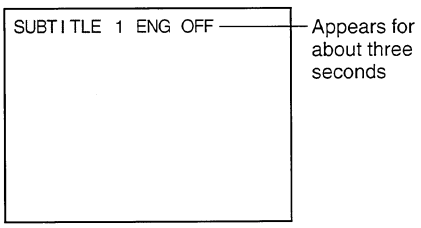


To turn off the subtitles

SUBTITLE

Hold down SUBTITLE for longer than one second.

The subtitles disappear.



Notes

- Some DVD video discs are set to display subtitles automatically, and you cannot turn them off even if you set the subtitle function to off.
- During some scenes, the subtitles may not appear immediately after you press the SUBTITLE button.

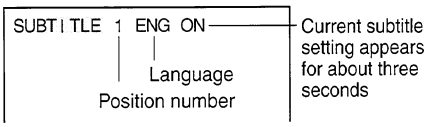
Selecting a Subtitle Language

DVD

You can easily select the subtitle language from those included on the DVD video disc.

1 SUBTITLE

Press SUBTITLE during playback.



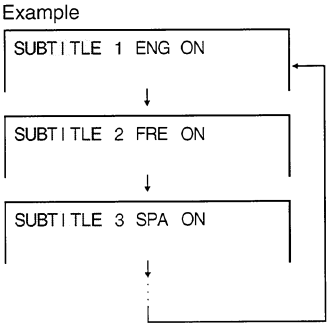
The abbreviation of the language appears instead of the language name. Refer to the list of languages and their abbreviations. 41

2 SUBTITLE

Press SUBTITLE or ▲ while the subtitle setting appears on the TV screen.

Each time you press the SUBTITLE or ▲ button, the subtitle languages included on the DVD video disc change.

Example



▼ : Cycles backwards

To turn off the subtitle setting indication

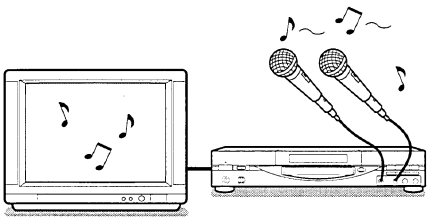
RETURN / CLEAR

Hold down RETURN/CLEAR for longer than one second.

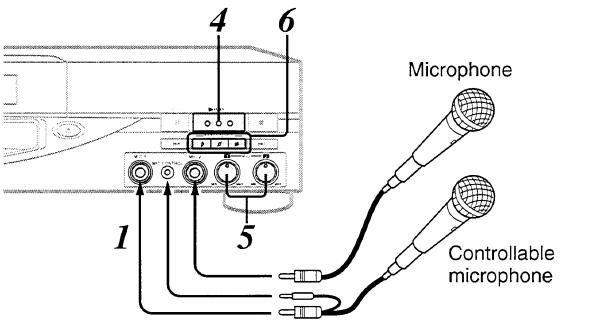
Notes

- When you turn on the DVD video player or replace a disc, the player returns to the initial default setting.
  When you select a subtitle language which is not included on the disc, the DVD video player plays a prior language programmed on the disc.
- During some scenes, the subtitles may not appear immediately after you change the subtitle language by pressing the ▲ / ▼ buttons.

Playing Karaoke



You can enjoy Karaoke with one or two microphones.

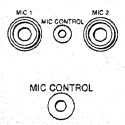


DVD VCD CD

Playing Karaoke

■ Preparations

- Connect the DVD video player to your TV using the ANALOG AUDIO OUT jacks.
- Set "AUDIO OUT SEL." to "ANALOG/PCM" via the on-screen displays. 31

1 

Connect the microphone to MIC 1 or MIC 2 jack.

When using a controllable microphone, connect it to the MIC CONTROL jack.

2

Press KARAOKE to turn on the karaoke mode.

The buttons for karaoke operation on the remote control turn available.
If you press the KARAOKE button again, the karaoke mode turns off and the buttons do not work for karaoke.

3

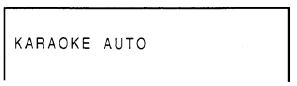
Press KARAOKE ON/OFF.

Select the karaoke mode by pressing the button repeatedly.

KARAOKE AUTO: The Karaoke mode is automatically turned on only when you play a DVD karaoke disc.

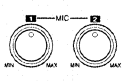
KARAOKE ON: The Karaoke mode is on regardless of kinds of discs.

KARAOKE OFF: The Karaoke mode is turned off.



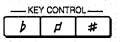
4

Start playback.

5 

Adjust the volume of the microphone.

MIC 1: To adjust the volume of the microphone connected to the MIC 1 jack.
MIC 2: To adjust the volume of the microphone connected to the MIC 2 jack.

6 

Adjust the key.

: To key up.
♭ : To key down.
♯ : To reset the key.

To play karaoke using a controllable microphone

If you connect a controllable microphone to the MIC CONTROL jack, you can use the following functions on the microphone.
For more details, refer to the Owner's Manual of the microphone.

ONCE MORE
Pressing the button sends back the karaoke song for about five seconds. This function may turn off the superimposed lyrics.

KEY CONTROL
Key can be adjusted.
: key up
♭ : key down

To finish the karaoke play

1 Press the KARAOKE ON/OFF button to select "KARAOKE OFF".

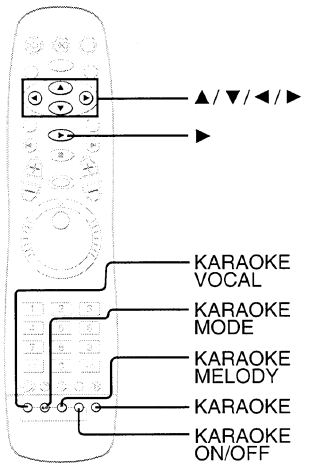
When a DVD karaoke disc is played to the end in the KARAOKE AUTO mode, the karaoke mode is automatically turned off.

2 Press the KARAOKE button to return to the normal mode.

3 Disconnect the microphone from the MIC jack.

Notes

If a howl noise occurs, try as follows.
- Make the microphone away from the speaker.
- Lower the microphone volume.
- Lower the speaker volume.



■ **Functions available on this DVD video player (in the KARAOKE ON mode)**

Button	DVD video disc	VIDEO CD/Audio CD
(A-B) MODE	• Echo adjustment • Key adjustment	• Echo adjustment • Key adjustment
VOCAL	• Sound selection of Vocal 1 and Vocal 2	• Sound selection of left and right channels • Vocal cancel* • Vocal change*
MELODY	• Balance adjustment between Vocal 1 and Vocal 2 • Balance adjustment beween accompaniment and vocal • Balance adjustment between accompaniment and melody	• Sound multiplex balance adjustment

*Vocal cancel: puts off only a vocal part centered in stereo-recorded sound of a VIDEO CD or an audio CD.

*Vocal change: As you sing into the microphone, a vocal part recorded in sound-multiplex is put off and your vocal is heard.

DVD VCD CD

Various Function Setting

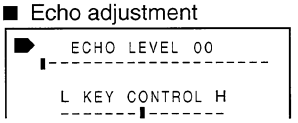
Some DVD video discs are categorized as karaoke discs. In a karaoke disc, karaoke L (accompaniment for left channel), karaoke R (accompaniment for right channel), guide melody, vocal 1 and vocal 2 are recorded. In some discs, the guide melody, vocal 1 and vocal 2 may not be recorded.

To adjust the echo level or key:

(A-B) MODE

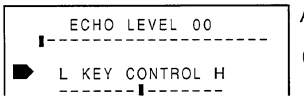
Press KARAOKE MODE.

■ Echo adjustment



Adjust with ◄ ► ▲ ▼

■ Key adjustment



Adjust with ◄ ► ▲ ▼

To select the sound:

VOCAL

Press KARAOKE VOCAL.

Select the sound type by pressing the button repeatedly.

• The display does not show indication of the sound which is not recorded.

■ **DVD video disc**

VOCAL OFF
Vocal is not output.
↓
VOCAL 1.2
Vocal 1 and Vocal 2 are output.
↓
VOCAL 1
Only Vocal 1 is output.
↓
VOCAL 2
Only Vocal 2 is output.
↓
VOCAL MIX
Vocal 1 and Vocal 2 is mixed and output.

■ **VIDEO CD/Audio CD**

L.R
Stereo sound is output.
↓
L
Left channel sound is output.
↓
R
Right channel sound is output.
↓
MIX
Mixed sound of left and right channel is output.
↓
VOCAL CANCEL
Puts off the vocal part in stereo sound.
↓
VOCAL CHANGE
Vocal via microphone is output from left channel.

• The vocal cancel function may not work in some discs.
• The vocal change function works with a disc recorded in sound-multiplex.

To adjust the balance:

MELODY

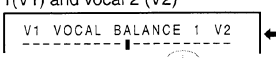
Press KARAOKE MELODY.

Select the adjustment item by pressing the button repeatedly.

• The display does not show indication of the sound which is not recorded.

■ **DVD video disc**

Balance adjustment between vocal 1(V1) and vocal 2 (V2)

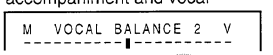


Adjust with ◄ ► ▲ ▼.

(Adjust when VOCAL 1. 2 or VOCAL MIX is selected with the KARAOKE VOCAL button.)

↓

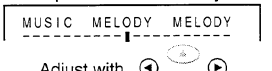
Balance adjustment between accompaniment and vocal



Adjust with ◄ ► ▲ ▼.

↓

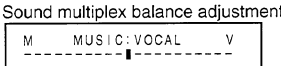
Balance adjustment between accompaniment and melody



Adjust with ◄ ► ▲ ▼.

■ **VIDEO CD/Audio CD**

Sound multiplex balance adjustment

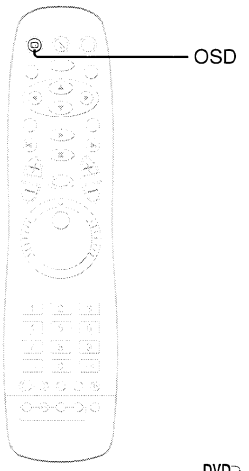


Adjust with ◄ ► ▲ ▼.

(Adjust when MIX is selected with KARAOKE VOCAL button.)

Advanced Playback

Using the On-Screen Display



You can view information about a disc and its operational status on the TV screen.

Checking the Operational Status

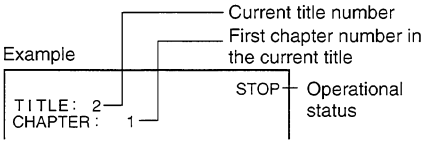
DVD VCD CD

You can view the current title number, track number, and total playing time of the disc on the TV screen.

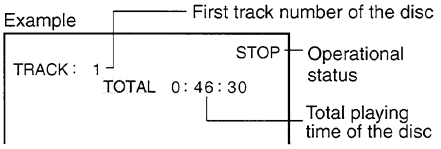
OSD

Press OSD while playback is stopped.

DVD video disc



VIDEO CD/Audio CD



Total playing time of the disc is displayed in the DVD display.

To turn off the on-screen display

OSD

Press OSD again.

Checking the Remaining Time and Setting Status

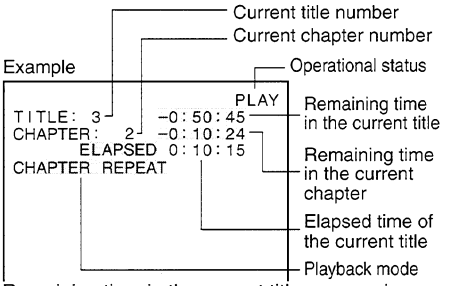
DVD VCD CD

You can view the elapsed time, remaining time, and setting status of the disc on the TV screen.

1 OSD

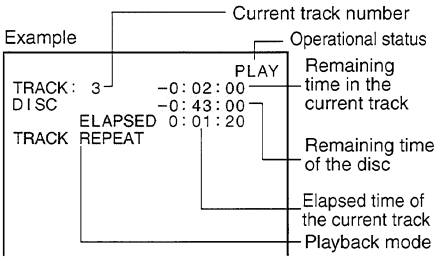
Press OSD during playback.

DVD video disc



Remaining time in the current title appears in the DVD display.

VIDEO CD/Audio CD



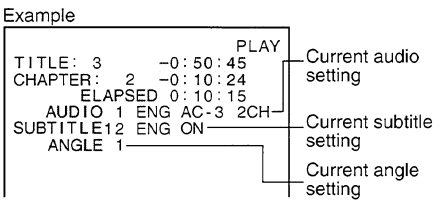
Remaining time in the current track appears in the DVD display.

2 OSD

Press OSD again during playback.

When you play back a VIDEO CD/Audio CD, the on-screen display turns off.

DVD video disc



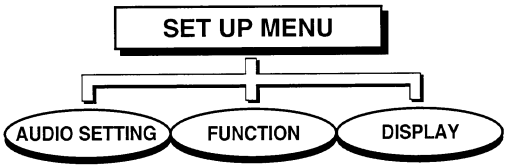
The abbreviation of the language (e.g. ENG) appears instead of the language name. Refer to the list of languages. 41

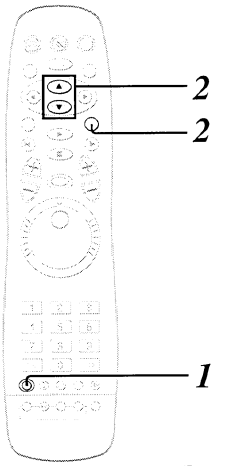
To turn off the on-screen display

OSD

Press OSD again.

Customizing the Settings





You can change the default settings to customize performance to your preference.

DVD VCD CD

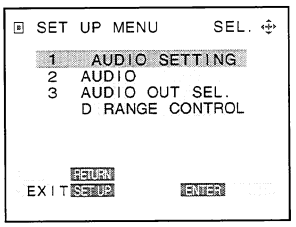
Displaying the SET UP MENU Screen

The SET UP MENU screen asks you to select a setting for AUDIO SETTING, FUNCTION and DISPLAY. You may adjust the settings in the category using the succeeding screen.

1 SETUP

Press SETUP while playback is stopped.

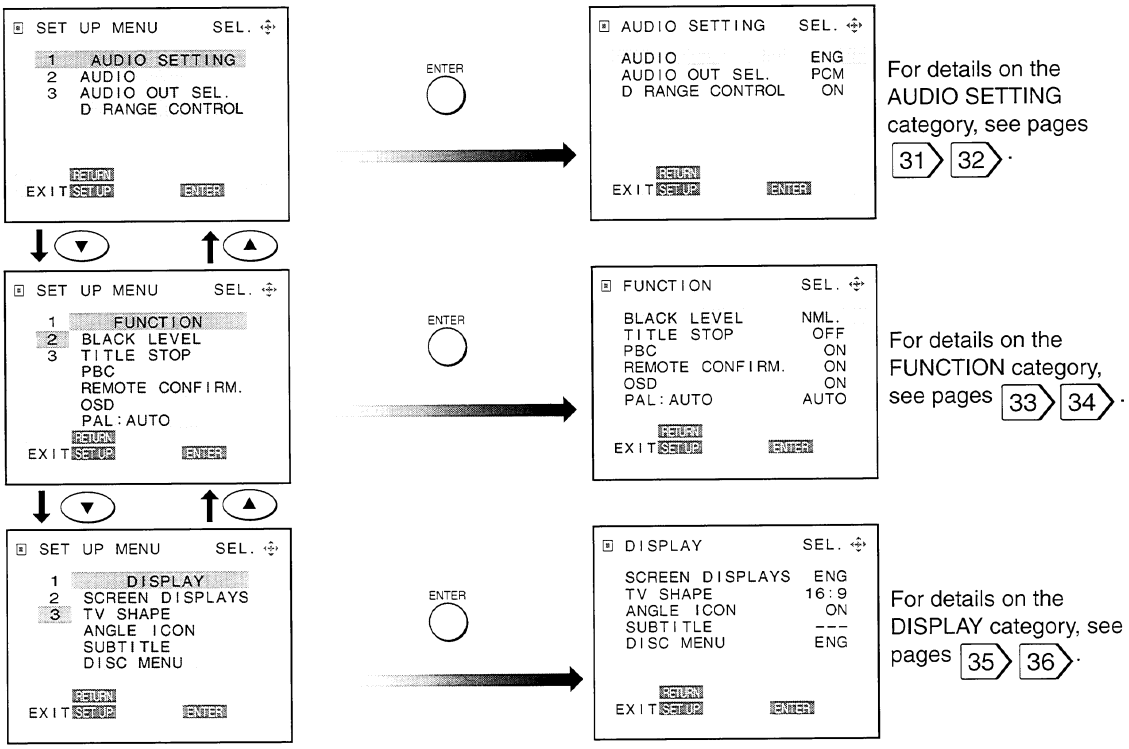
The SET UP MENU screen appears.



- The display language can be changed.
  Select DISPLAY in step *2*, then select SCREEN DISPLAYS to change the display language 35.

2 ▲/▼ ENTER

Press ▲/▼ to select the category (AUDIO SETTING, FUNCTION or DISPLAY), then press ENTER.

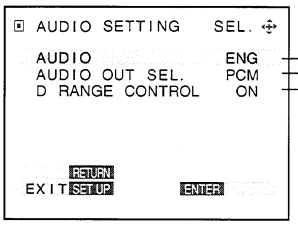


Note

The SET UP MENU screen disappears if you press the SETUP button while it is displayed.

Customizing the Settings *(continued)*

AUDIO SETTING



To select a preferred language from those included on the disc. 25

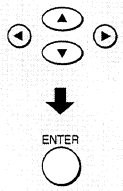
To switch MPEG/AC-3 and ANALOG/PCM. 11 12 13 14 45

To turn on or off the function that makes faint sounds easier to hear, even if you lower the volume in late hours playback.

Setting the Audio Sound

After you select AUDIO SETTING on the SET UP MENU screen 30, adjust the categories to your preference.

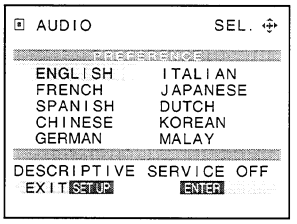
3



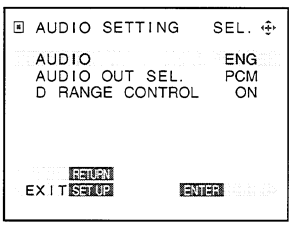
Press ▲/▼ to select the item, then press ENTER.

The setting screen of your selected item appears.

When AUDIO is selected: DVD

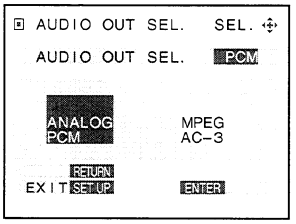


Select a preferred language by pressing ▲/▼/◀/▶, then press ENTER.

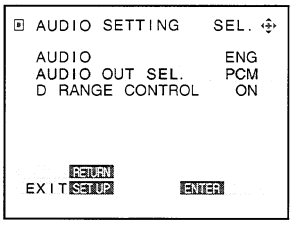


- Some DVD video discs contain special audio that describes the actions on-screen for visually impaired persons. When you set DESCRIPTIVE SERVICE to "ON" by pressing the AUDIO button, the DVD video player automatically plays this special feature.
- Some DVD video discs may not include your pre-selected language. In this case, the DVD video player automatically plays the disc's initial language offering.

When AUDIO OUT SEL. is selected: DVD VCD CD

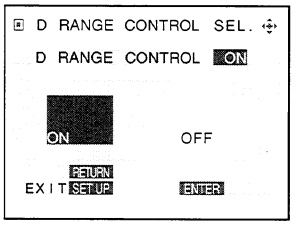


Select the output sound type MPEG/AC-3 or ANALOG/PCM by pressing ◀/▶, then press ENTER.

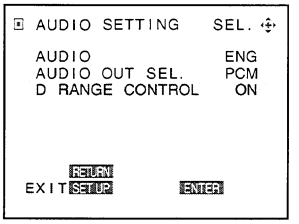


- Select the output sound type according to your system connection. 11 12 13 14 45

When D RANGE CONTROL is selected: DVD

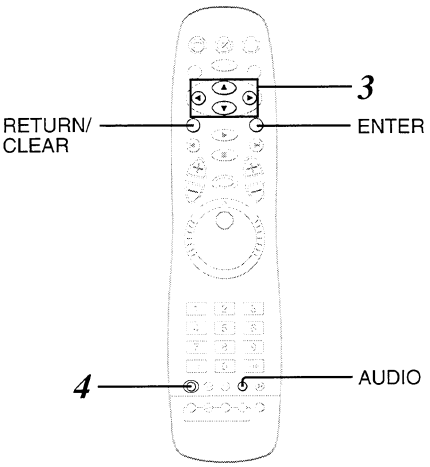


Select ON or OFF by pressing ◀/▶, then press ENTER.



ON: Dynamic range is reduced.
OFF: Full dynamic range is heard.

- This function works on playback of Dolby Digital (AC-3) recorded discs.
- The level of dynamic range reduction may differ depending on the DVD video disc.



RETURN / CLEAR : **If you press the RETURN/CLEAR button while a menu appears on the screen, you will return to the previous menu screen.**

DVD VCD CD

---

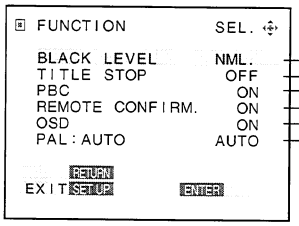
4 SETUP

Press SETUP.

The setting screen disappears.

Customizing the Settings *(continued)*

FUNCTION



- **To select the black level (contrast) of playback pictures. (for NTSC TVs only)**
- **To turn on or off the function that automatically stops playback after playing one title.**
- **To use the menu screens when playing PBC-controllable VIDEO CDs.** 16
- **To turn on or off the confirmation beeper for each press of a remote control button.**
- **To turn on or off the operational status display (on-screen display) on the TV screen.**
- **To select to the video system of a disc.**

Setting the Functions

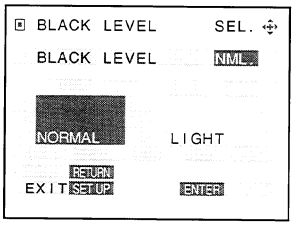
After you select FUNCTION on the SET UP MENU screen 30, adjust the categories to your preference.

3 ENTER

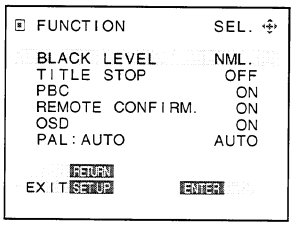
Press ▲/▼ to select the item, then press ENTER.

The setting screen of your selected item appears.

When BLACK LEVEL is selected: DVD VCD

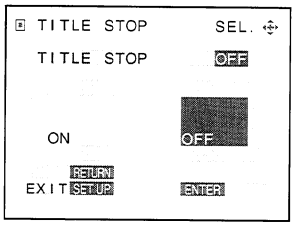


Select a preferred black level by pressing ◄ / ►, then press ENTER.

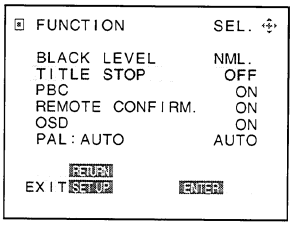


NORMAL: Standard black level (contrast).
LIGHT: Brighter than in NORMAL.

When TITLE STOP is selected: DVD

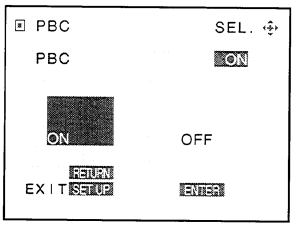


Select ON or OFF by pressing ◄ / ►, then press ENTER.

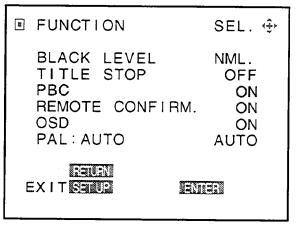


OFF: Player continues playing the disc after playback of a title is completed.
ON: Player stops playing the disc after playback of a title is completed.

When PBC is selected: VCD

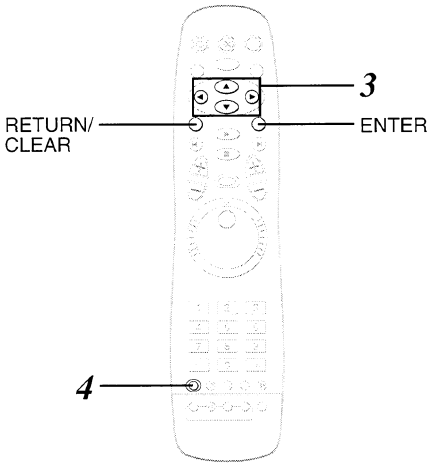


Select ON or OFF by pressing ◄ / ►, then press ENTER.



ON: To use the menu screen when playing a PBC-controllable VIDEO CD.
OFF: When playing without using the menu screen.

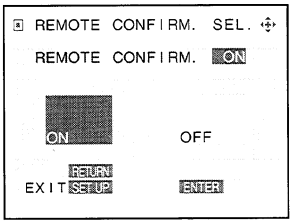
• PBC is the abbreviation of Playback Control.



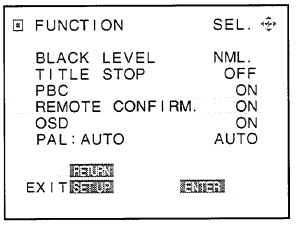
RETURN/CLEAR : **If you press the RETURN/CLEAR button while a menu appears on the screen, you will return to the previous menu screen.**

DVD VCD CD

When REMOTE CONFIRM. is selected: DVD VCD CD

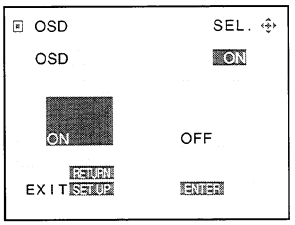


Select ON or OFF by pressing ◀ / ▶, then press ENTER.

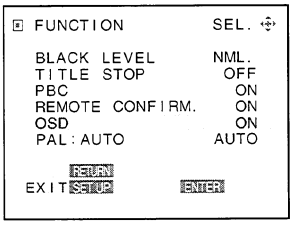


ON: Beeper sounds with each press of a remote control button.
OFF: The beeper does not sound.

When OSD is selected: DVD VCD CD

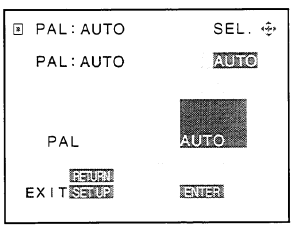


Select ON or OFF by pressing ◀ / ▶, then press ENTER.

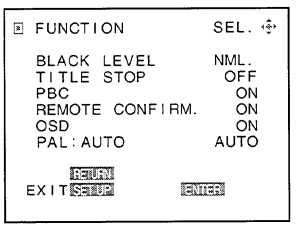


ON: Operational modes are displayed on-screen. (e.g. "PLAY")
OFF: Operational modes are not displayed.

When PAL:AUTO is selected: DVD VCD



Select PAL or AUTO by pressing ◀ / ▶, then press ENTER.



PAL: For PAL discs. Connect a PAL TV.
AUTO: NTSC discs and PAL discs are automatically identified.
Connect a multi-TV (compatible with PAL and NTSC).
A picture may be disturbed when the NTSC or PAL signal recorded is switched.

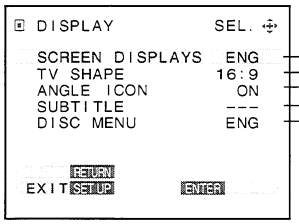
4 SETUP

Press SETUP.

The setting screen disappears.

Customizing the Settings *(continued)*

DISPLAY



To select the display language.

To select a picture size according to the aspect ratio of your TV.

To display the angle icon indicator on screen.

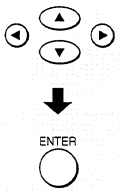
To select a preferred subtitle language from those included on the DVD video disc. 26

To select a preferred disc menu language from those included on the DVD video disc.

Setting the Displays

After you select DISPLAY on the SET UP MENU screen 30, adjust the categories to your preference.

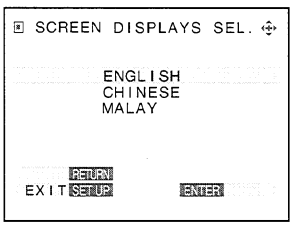
3



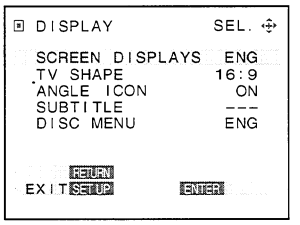
Press ▲/▼ to select the item, then press ENTER.

The setting screen of your selected item appears.

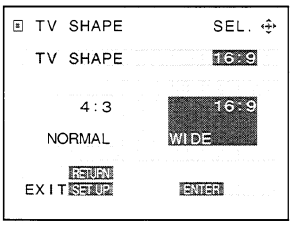
When SCREEN DISPLAY is selected: DVD VCD CD



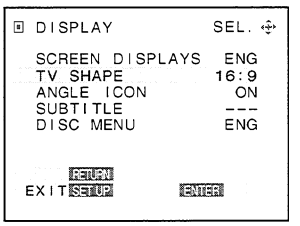
Select a preferred language by pressing ▲/▼, then press ENTER.



When TV SHAPE is selected: DVD



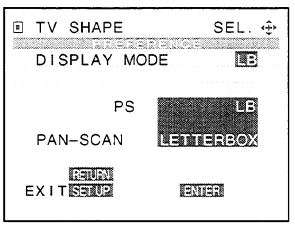
Select your TV type by pressing ◀/▶, then press ENTER.



16:9 (WIDE): Select when a 16:9 wide TV is connected.
4:3 (NORMAL): Select when a 4:3 normal TV is connected.

- The displayable picture size is preset on the DVD video disc. Therefore, the playback picture of some DVD video discs may not conform to the picture size you select.
- When you play DVD video discs recorded in the 4:3 picture size only, the playback picture always appears in the 4:3 picture size, regardless of the TV shape setting.

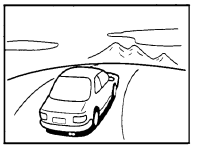
If you select 4:3 (NORMAL):



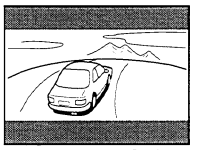
Select PS or LB by pressing ◀/▶, then press ENTER.

PS (PAN–SCAN):
Displays pictures cropped to fill your TV screen. Either or both sides of the picture are cut off.

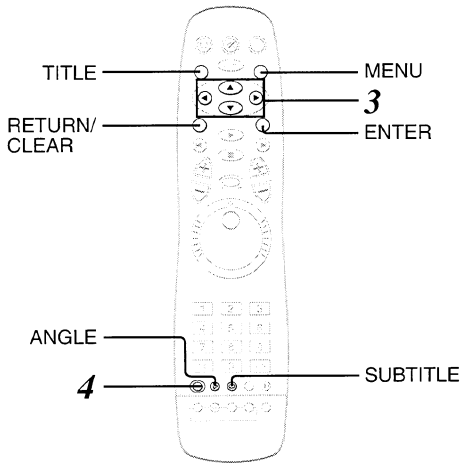
LB (LETTER BOX):
Displays theatrical images with masking bars above and below the picture.



PS (PAN–SCAN)



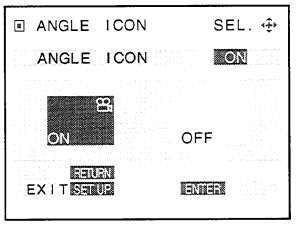
LB (LETTERBOX)



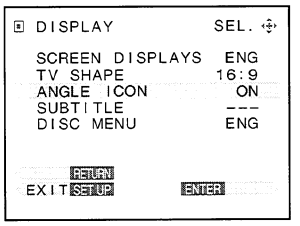
RETURN / CLEAR : **If you press the RETURN/CLEAR button while a menu appears on the screen, you will return to the previous menu screen.**

DVD VCD CD

When ANGLE ICON is selected: DVD



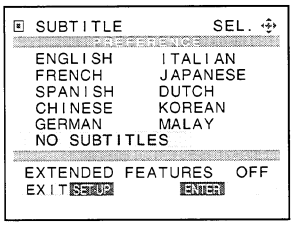
Select ON or OFF by pressing ◄ / ►, then press ENTER.



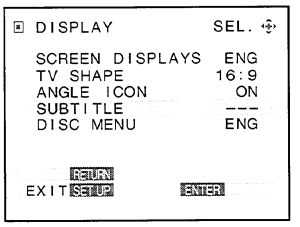
ON: The angle icon automatically appears in white on the TV screen while a scene recorded from multiple angles is played back. When you display the angle number on the screen by pressing the ANGLE button, the angle icon is lit in red.

OFF: The angle icon is not displayed.

When SUBTITLE is selected: DVD



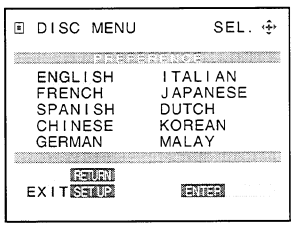
Select a preferred language by pressing ▲/▼/◄/►, then press ENTER.



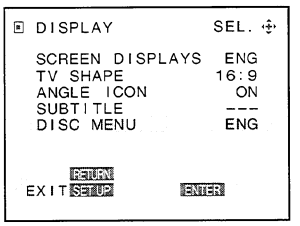
Some DVD video discs contain special subtitles, an enhancement of closed captioning for hearing impaired persons. When you set EXTENDED FEATURES to "ON" by pressing the SUBTITLE button, the DVD video player automatically displays these special subtitles.

- Some DVD video discs may not include your pre-selected language. In this case, the DVD video player automatically displays subtitles consistent with the disc's initial language setting.

When DISC MENU is selected: DVD

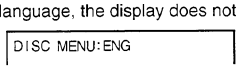


Select a preferred language by pressing ▲/▼/◄/►, then press ENTER.



To change the language while a disc is inserted:

1) Press the TITLE or MENU button to display the disc menu.
2) Press the SETUP button.
   If the disc menu has only one language, the display does not appear.



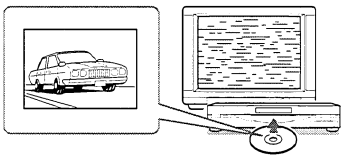
3) Press the SETUP button repeatedly to select the language. Refer to "Table of languages." 41
4) Press the ENTER button.
   The disc menu is displayed in the selected language.

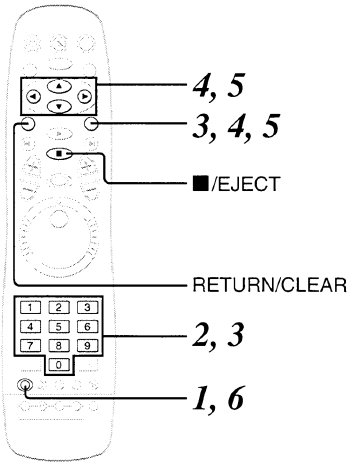
4 SETUP

Press SETUP.

The setting screen disappears.

Setting the Parental Lock





You can use the parental lock function only with DVD video discs equipped with the parental lock feature.

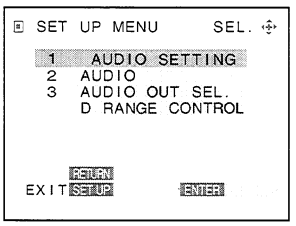
Setting the Parental Lock

DVD video discs equipped with the parental lock function are rated according to their content. The contents allowed by a parental lock level and the way a DVD video disc can be controlled may vary from disc to disc. For example, you can cut out violent scenes unsuitable for children and replace them with more suitable scenes, or lock out playback of the disc altogether.

1 SETUP

Press SETUP while playback is stopped.

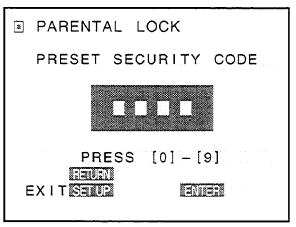
The SET UP MENU appears on the TV screen.



2 9 ⬇ 9

Press 9 twice.

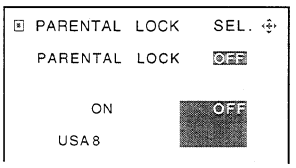
The following menu appears.



3 1 2 3 / 4 5 6 / 7 8 9 / 0 ⬇ ENTER

Press the number buttons to create a personal four-digit security code, then press ENTER.

Example

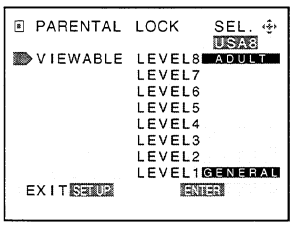


If you make a mistake before pressing the ENTER button, press the **RETURN/CLEAR** button and start over again from step *2*.

4 ENTER

Press ◄/► to select "ON," then press ENTER.

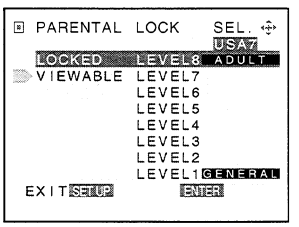
The following menu appears.



5 ENTER

Press ▲/▼ to highlight the parental lock level, then press ENTER.

You cannot play DVD video discs rated higher than the level you selected unless you cancel the parental lock function. For example, when you select level 7, the discs rated higher than level 7 are locked out and cannot be played.



The parental lock level is equivalent to the following USA movie ratings.

LEVEL 7: NC-17 LEVEL 3: PG
LEVEL 6: R LEVEL 1: G
LEVEL 4: PG 13

6 SETUP

Press SETUP.

The SET UP MENU disappears.

RETURN / CLEAR : **If you press the RETURN/CLEAR button while a menu appears on the screen, you will return to the previous menu screen.**

DVD

To change the parental lock level

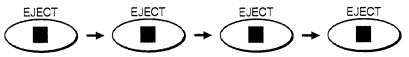
You can change the parental lock level by following the steps in "Setting the Parental Lock."
At step *3*, press the **number buttons** to enter your four-digit security code, then continue to step *4*.

To change your four-digit security code

You can change your four-digit security code.

1 Follow steps *1* and *2* in "Setting the Parental Lock."

2 Press the ■ **/EJECT** button four times while the security code menu appears on the TV screen.



The four-digit security code is cleared.

3 Press the **number buttons** to create a new four-digit security code, then press the **ENTER** button.

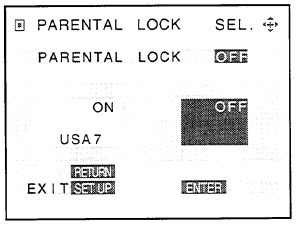
4 Complete steps *4* – *6* in "Setting the Parental Lock."

To cancel the parental lock function

1 Follow steps *1* and *2* in "Setting the Parental Lock."

2 Press the **number buttons** to enter your four-digit security code, then press the **ENTER** button.

3 Press ◀ / ▶ to select "OFF," then press the **ENTER** button.



The SET UP MENU appears again.

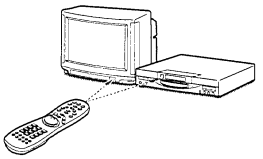
4 Press the **SETUP** button.

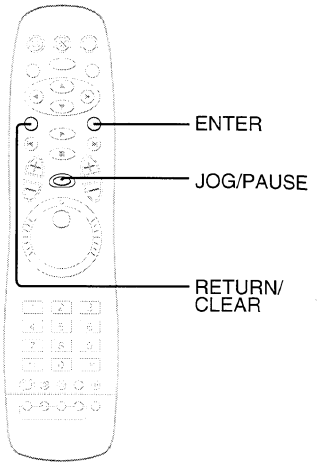
The SET UP MENU disappears, and the parental lock function is cancelled.

Note

DVD video discs may or may not respond to the parental lock settings. Make sure this function works with your DVD video discs.

Operating Other Equipment with the Remote Control





You can operate the basic functions of selected TVs, amplifiers and receivers using the supplied remote control.

Programming the Remote Control

You can operate other equipment with the DVD video player's remote control.

1 RETURN/CLEAR, ENTER

Press and hold RETURN/CLEAR and ENTER simultaneously until JOG/PAUSE lights up.

2

Release RETURN/CLEAR and ENTER.

3 1 2 3 4 5 6 7 8 9 0

Press the number buttons that correspond to your equipment's brand code (listed at right).

Example: To program brand code 040 press

0 → 4 → 0

When you press the last digit, the JOG/PAUSE button blinks twice, then turns off.

4

Point the remote control at the equipment you want to operate.

Brand Code Table

TV brand code

Brand name	Brand code
Goldstar	002, 003, 017, 024, 026, 030, 032, 042, 072, 105, 164, 227, 247, 250
Grundig	267
Panasonic	037, 041, 093, 094, 138, 149, 190, 210
Philips	030, 040
Samsung	017, 024, 026, 032, 042, 043, 059, 105, 184, 226, 237, 253
Sanyo	080, 086, 091, 126, 141, 211, 234, 254
Sharp	032, 062, 085, 089, 096, 136, 152, 162, 217, 222, 258, 278
Sony	001, 009, 056, 075
Toshiba	029, 043, 082, 086, 088, 262

Amplifier brand code

Brand name	Brand code
Accuphase	429
Carver	420
Denon	411
Goldstar	402
Harman/Kardon	405
JVC	425
Kenwood	428
Luxman	412
Marantz	420, 424
Nakamichi	424
Panasonic	423
Philips	420
Pioneer	401, 422
Sony	415
Technics	423, 434
Yamaha	408, 410, 427, 433

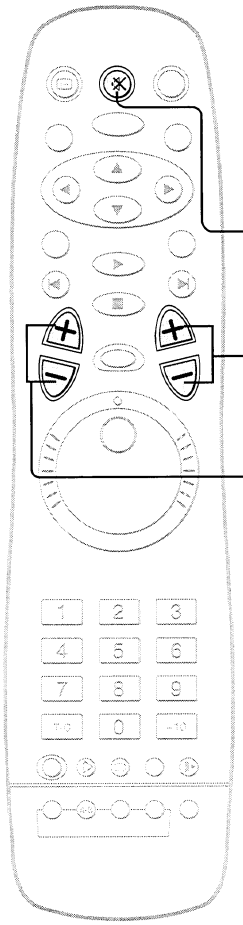
Receiver brand code

Brand name	Brand code
Harman/Kardon	530, 531
Inkel	510, 517, 519, 595, 633, 637, 640, 641, 655
JVC	521, 630
Kenwood	510, 523, 556, 589, 590
Luxman	577, 596, 597, 622, 623
Marantz	503, 511, 536, 557, 560, 603, 628
Onkyo	528, 535, 539, 542, 610
Panasonic	511, 588, 612
Philips	557, 677
Pioneer	544, 582, 645, 674
Sansui	557, 558, 594, 600, 661
Sherwood	517, 519, 595, 633, 637, 640, 655, 682
Sony	545, 549, 620, 632
Technics	511, 564, 588
Techwood	580, 599, 607
Yamaha	525, 526, 551, 556, 583, 650, 691

Notes

- The same brand may use different codes depending on the model. Enter the correct number, referring to the brand code table.
- For some brands, several codes are provided. Try each of them until the remote control operates your equipment.
- Some equipment may not respond to all of the functions in the table in the next page, or may not be operated at all with this remote control. In this case, operate that equipment with its own remote control.
- If you replace the remote control's batteries, remember to reprogram the brand code.

Buttons to operate



	TV	Amplifier	Receiver
TV	To mute the sound.	To mute the sound.	To mute the sound.
TV CH (+/–)	To select channels.		
TV VOL (+/–)	To turn up or down the volume.	To turn up or down the volume.	To turn up or down the volume.

Table of Languages

Table of Languages and Their Abbreviations

Abbreviation of the Language	Language
– – –	No alternate language
CHI	Chinese
DUT	Dutch
ENG	English
FRE	French
GER	German
ITA	Italian
JPN	Japanese
KOR	Korean
MAY	Malay
SPA	Spanish
AA	Afar
AB	Abkhazian
AF	Afrikaans
AM	Amharic
AR	Arabic
AS	Assamese
AY	Aymara
AZ	Azerbaijani
BA	Bashkir
BE	Belorussian
BG	Bulgarian
BH	Bihari
BI	Bislama
BN	Bengali, Bangla
BO	Tibetan
BR	Breton
CA	Catalan
CO	Corsican
CS	Czech
CY	Welsh
DA	Danish
DZ	Bhutani
EL	Greek

Abbreviation of the Language	Language
EO	Esperanto
ET	Estonian
EU	Basque
FA	Persian
FI	Finnish
FJ	Fiji
FO	Faroese
FY	Frisian
GA	Irish
GD	Scottish Gaelic
GL	Galician
GN	Guarani
GU	Gujarati
HA	Hausa
HI	Hindi
HR	Croatian
HU	Hungarian
HY	Armenian
IA	Interlingua
IE	Interlingue
IK	Inupiak
IN	Indonesian
IS	Icelandic
IW	Hebrew
JI	Yiddish
JW	Javanese
KA	Georgian
KK	Kazakh
KL	Greenlandic
KM	Cambodian
KN	Kannada
KS	Kashmiri
KU	Kurdish
KY	Kirghiz
LA	Latin

Abbreviation of the Language	Language
LN	Lingala
LO	Laotian
LT	Lithuanian
LV	Latvian, Lettish
MG	Malagasy
MI	Maori
MK	Macedonian
ML	Malayalam
MN	Mongolian
MO	Moldavian
MR	Marathi
MT	Maltese
MY	Burmese
NA	Nauru
NE	Nepali
NO	Norwegian
OC	Occitan
OM	(Afan) Oromo
OR	Oriya
PA	Panjabi
PL	Polish
PS	Pashto, Pushto
PT	Portuguese
QU	Quechua
RM	Rhaeto-Romance
RN	Kirundi
RO	Rumanian
RU	Russian
RW	Kinyarwanda
SA	Sanskrit
SD	Sindhi
SG	Sango
SH	Serbo-Croatian
SI	Singhalese
SK	Slovak

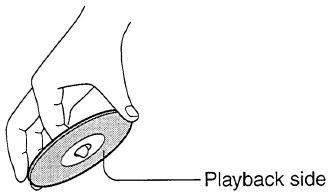
Abbreviation of the Language	Language
SL	Slovenian
SM	Samoan
SN	Shona
SO	Somali
SQ	Albanian
SR	Serbian
SS	Siswati
ST	Sesotho
SU	Sundanese
SV	Swedish
SW	Swahili
TA	Tamil
TE	Telugu
TG	Tajik
TH	Thai
TI	Tigrinya
TK	Turkmen
TL	Tagalog
TN	Setswana
TO	Tongan
TR	Turkish
TS	Tsonga
TT	Tatar
TW	Twi
UK	Ukrainian
UR	Urdu
UZ	Uzbek
VI	Vietnamese
VO	Volapük
WO	Wolof
XH	Xhosa
YO	Yoruba
ZU	Zulu

Notes on Discs

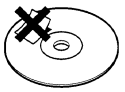
This section shows you how to handle, clean, and store discs.

Handling Discs

- Do not touch the playback side of the disc.

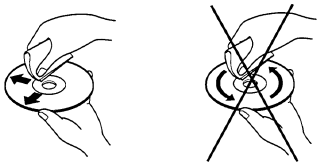


- Do not attach paper or tape to discs.



Cleaning Discs

- Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outward with a soft cloth. Always keep the disc clean.



- If you cannot wipe off the dust with a soft cloth, wipe the disc lightly with a slightly moistened soft cloth, then dry the disc with a dry cloth.
- Do not use any type of solvent such as thinner, benzine, commercially available cleaners, or antistatic spray for vinyl LPs. These may damage the disc.

Storing Discs

- Do not store discs in a place subject to direct sunlight or heat.
- Do not store discs in places subject to moisture and dust, such as in a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing objects on discs may cause warping.

About This Owner's Manual

This owner's manual explains the basic instructions of this DVD video player. Some DVD video discs are produced in a manner that allows specific or limited operation during playback. As such, the DVD video player may not respond to all operating commands. Refer to the instruction notes of discs.

" 🚫 " may appear on the TV screen during operation.
A white " 🚫 " means that the operation is not permitted by the DVD video player; a red " 🚫 " means the operation is not permitted by the DVD video disc.

Playable Discs

This DVD video player can play the following discs.

	Disc mark	Contents	Disc size	Maximum playback time
DVD video discs	DVD VIDEO	Audio + Video (moving pictures)	12 cm	Approx. 4 hours (single sided disc)
				Approx. 8 hours (double sided disc)
			8 cm	Approx. 80 minutes (single sided disc)
				Approx. 160 minutes (double sided disc)
VIDEO CDs	COMPACT disc DIGITAL VIDEO	Audio + Video (moving pictures)	12 cm	Approx. 74 minutes
			8 cm	Approx. 20 minutes
Audio CDs	COMPACT disc DIGITAL AUDIO	Audio	12 cm	Approx. 74 minutes
			8 cm (CD single)	Approx. 20 minutes

You cannot play discs other than those listed above.

This DVD video player uses the NTSC/PAL color system and cannot play DVD video discs recorded in any other color system (SECAM, etc.).

Notes on Region Numbers

The region number of this DVD video player is 3. If region numbers, which stand for their playable area, are printed on your DVD video disc and you do not find 3 or ALL , disc playback will not be allowed by the player. (In this case, the DVD video player displays a message.)

Notes on Copyright

It is forbidden by law to copy, broadcast, show, broadcast on cable, play in public, and rent copyrighted material without permission.

DVD video discs are copy protected, and any recordings made from these discs will be distorted.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Type of TV system

Connect this DVD video player to a TV compatible with PAL/3.58 NTSC system.

Before Calling Service Personnel

Check the following guide for the possible cause of a problem before requesting service.

Symptoms and Correction

Symptom	Cause	Correction	Page
No power.	The power plug is disconnected.	Connect the power plug into the wall outlet securely.	11, 12
No picture.	• The TV is not set to receive DVD signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD video player appears on the TV screen.	15
	• The video cable is not connected securely.	• Connect the video cable into the jacks securely.	11, 12, 13, 14
No sound.	• The equipment connected with the audio cable is not set to receive DVD signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD video player.	15
	• The audio cables are not connected securely.	• Connect the audio cable to the jacks securely.	11, 12, 13, 14
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.	–
	• The setting of output sound type is not correct.	• Set the audio setting correctly.	30, 31
The playback picture has occasional distortion.	• The disc is dirty.	• Eject the disc and clean it.	42
	• It is in fast forward or fast reverse playback.	• Sometimes a small amount of picture distortion may appear. This is not a malfunction.	–
Brightness is unstable or noises are produced on playback pictures.	• The copy protection is in effect.	• Connect the DVD video player to the TV directly.	11
The DVD video player does not start playback.	• No disc is inserted.	• Insert a disc. (Check that the DVD or VCD or audio CD indicator in the DVD display is lit.)	8
	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type and color system.)	42
	• The disc is placed upside down.	• Place the disc with the playback side down (label facing up).	15
	• The disc is not placed within the guide.	• Place the disc correctly inside the guide in the disc tray.	15
	• The disc is dirty.	• Clean the disc.	42
	• A menu is on the TV screen.	• Press the SETUP button to turn off the menu screen.	–
	• The parental lock function is set.	• Cancel the parental lock function or change the parental lock level.	37, 38
Buttons do not work.	Power supply fluctuations or other abnormalities such as static electricity may interrupt correct operations.	Turn the power on or off with the POWER button. Or, disconnect the power plug and insert it into the wall outlet again.	–
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the DVD video player.	• Point the remote control at the remote sensor of the DVD video player.	10
	• The remote control is too far from the DVD video player.	• Operate the remote control within about seven meters.	10
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.	10
The MEMORY, REPEAT, REPEAT A-B and SHUFFLE buttons do not work.	• The DVD video player is in the karaoke mode.	• Press the KARAOKE button to switch the mode from karaoke to normal.	27

Specifications

DVD Video Player/Outputs/Supplied Accessories

[DVD Video Player]

Power supply	230 V AC, 50 Hz
Power consumption	20 VA
Mass	3.6 kg
External dimensions	430 × 81 × 308 mm (W/H/D)
Signal system	PAL/3.58 NTSC
Laser	Semiconductor laser, wavelength 650 nm
Frequency range (digital audio)	DVD linear sound : 48 kHz sampling 4 Hz to 22 kHz 96 kHz sampling 4 Hz to 44 kHz Audio CD : 4 Hz to 20 kHz
Signal-to-noise ratio (digital audio)	More than 108 dB
Audio dynamic range (digital audio)	More than 96 dB
Harmonic distortion (digital audio)	Less than 0.004 %
Wow and flutter	Below measurable level (less than ±0.001 % (W.PEAK))
Operating conditions	Temperature: 5° C to 35° C, Operation status: Horizontal

[Outputs]

Video output	1.0 V (p-p), 75 Ω, negative sync., pin jack × 1
S video output	(Y) 1.0 V (p-p), 75 Ω, negative sync., Mini DIN 4-pin × 1 (C) 0.286 V (p-p), 75 Ω
Audio output (digital audio)	0.5 V (p-p), 75 Ω, pin jack × 1
Audio output (analog audio)	2.0 V (rms), 330 Ω, pin jack (L, R) × 2
Headphone terminal	32 Ω (30mW), Impedance: more than 8 Ω

[Supplied Accessories]

S video cable	1
Audio/video cable	1
Remote control	1
Batteries (R06)	3

• Designs and specifications are subject to change without notice.

Memo

Memo

■ Discs and output sounds

	DVD video discs							VIDEO CDs	Audio CDs
Sound recording system	Dolby Digital		MPEG 2		Linear PCM			MPEG 1	Linear PCM 44.1 kHz
					48 kHz	96 kHz			
Audio setting on the setting screen 30 31	MPEG/ AC-3	ANALOG/ PCM	MPEG/ AC-3	ANALOG/ PCM	MPEG/ AC-3 or ANALOG/ PCM	MPEG/ AC-3	ANALOG/ PCM	MPEG/ AC-3 or ANALOG/ PCM	MPEG/ AC-3 or ANALOG/ PCM
ANALOG AUDIO OUT jacks	–	○	–	○	○	○*	○**	○	○
DIGITAL AUDIO OUT jack	Dolby Digital bitstream	PCM (48 kHz)	MPEG 2 bitstream	PCM (48 kHz)	PCM (48 kHz)	PCM (48 kHz)	–	PCM (44.1 kHz)	PCM (44.1 kHz)

* : 48 kHz processed
** : 96 kHz processed

■ On VIDEO CD

This DVD video player supports the VIDEO CDs equipped with the PBC (Version 2.0) function. (PBC is the abbreviation of Playback Control.)
You can enjoy two playback variations depending on types of discs.

Type of disc	How to enjoy
VIDEO CD not equipped with PBC function (Version 1.1)	Sound and movie can be played on this DVD video player in the same way as an audio CD.
VIDEO CD equipped with PBC function (Version 2.0)	In addition to operations of a VIDEO CD not equipped with the PBC function, you can enjoy playback with interactive software and with search function by using the menu displayed on the TV screen (Menu Playback). Some of the functions described in this owner's manual may not work with some discs.

Memo

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